S. HRG. 100-435

WATER RESOURCES AND POLLUTION PROBLEMS IN LONG ISLAND SOUND

JOINT HEARING

BEFORE THE

SUBCOMMITTEE ON WATER RESOURCES, TRANSPORTATION, AND INFRASTRUCTURE

AND THE

SUBCOMMITTEE ON ENVIRONMENTAL PROTECTION

OF THE

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
UNITED STATES SENATE

ONE HUNDREDTH CONGRESS

FIRST SESSION

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WATER RESOURCE AND POLLUTION PROBLEMS IN LONG ISLAND SOUND

MONDAY, OCTOBER 26, 1987

U.S. SENATE, COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS, SUBCOMMITTEES ON WATER RESOURCES, TRANSPORTATION, AND INFRASTRUCTURE AND ENVIRONMENTAL PROTECTION,

Mamaroneck, NY.

The subcommittees met, pursuant to notice, at 9:30 a.m., in the Courtroom, Mamaroneck Town Center, 740 West Boston Post Road, Mamaroneck, New York, Hon. Daniel P. Moynihan (chairman of the Subcommittee on Water Resources, Transportation, and Infrastructure) presiding.

Present: Senator Moynihan.

OPENING STATEMENT OF HON. DANIEL PATRICK MOYNIHAN, U.S. SENATOR FROM THE STATE OF NEW YORK

Senator MOYNIHAN. Good morning. I am Senator Moynihan, and this begins a formal hearing of the Subcommittees on Water Resources, Transportation, and Infrastructure and Environmental Protection of the Senate Committee on Environment and Public Works.

I would especially like to welcome my colleague and friend, Representative DioGuardi, who has to get on, and who I think probably has 14 other things to do before noon.

The general subject is that of Long Island Sound and the specific subject is that of Mamaroneck and the beaches. It is our practice to hold hearings around the country, and increasingly in the coastal areas of the country. The course of development in our Nation has traditionally involved development of the waterways, the inland waterways and canals, the Ohio and Mississippi systems in particular, and the great water projects of the western deserts. About a third of the land of the lower 48 States in our country is in fact arid, and providing water for those deserts was a monumental effort in the first half of the 20th century. As we move toward the next century, however, we move toward a different set of situations. It is a rather astonishing fact, but as best we can now estimate by the year 1990—which is a year that makes no matter today—75 percent of the population will live within 50 miles of the coast, and the pressure on our coastal systems, our estuaries and such is increasingly pronounced.

Attention is not lagging all that far behind. The area here of Long Island Sound is quite extraordinary; 22 million people live on

Long Island Sound and in the nine counties. The Sound is 110 miles long, has 1,300 square miles, 577 miles of coastline in the Sound itself, and it has a number of watersheds including the fact that some of the water that makes its way into Long Island Sound rises in Quebec. Rather an odd bit of geography. And maintaining the Sound is obviously increasingly—not so much a difficult matter but a demanding one. It can be done, should be done, and in measure I think we are doing it. But we are behind, and if we don't catch up with that curve we're going to be in trouble, a situation not unlike that across the Sound on Long Island. The entire island lives on a sole-source aquifer. Everybody on Long Island drinks from one well, and that well is fine as long as it doesn't get turned. If it ever gets turned, it is a reversal. The water you drink in Long Island fell as rain 50 years ago.

As my distinguished friend, Mr. DioGuardi, knows, we have seen the closing of the beaches here on the Island. I was down with Mayor Notto at the beach; we were looking at the places that were, indeed, the source of so much trouble this summer.

I have an extensive statement which I'd like to place in the record at this point. I will refer to it from time to time, but I wanted to get along with the hearing and our distinguished guests. I also have remarks of Mayor Notto which would have been made were he able to be here. I will ask that that be put in the record at this time, as well.

[The statements referred to follow:]

OPENING STATEMENT OF HON. DANIEL PATRICK MOYNIHAN, U.S. SENATOR FROM THE STATE OF NEW YORK

I AM PLEASED TO WELCOME YOU TO A HEARING OF THE SUBCOMMITTEE ON WATER RESOURCES, TRANSPORTATION AND INFRASTRUCTURE, OF THE SENATE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS. I AM HERE THIS MORNING TO HEAR FROM FEDERAL, STATE, AND LOCAL OFFICIALS AS WELL AS OTHER CONCERNED CITIZENS ABOUT WATER RESOURCE AND POLLUTION PROBLEMS IN LONG ISLAND SOUND. AND I AM ALSO HERE TO TELL YOU ABOUT CONGRESSIONAL EFFORTS TO CONTINUE OUR NATION'S PROGRESS IN CLEANING UP OUR WATER, PRIMARILY THROUGH THE CLEAN WATER ACT. AS YOU KNOW, THE CONGRESS OVERRODE A PRESIDENTIAL VETO OF THE ACT ON FEBRUARY 4, 1987.

THOSE OF US WHO ARE HERE TODAY COME BECAUSE WE KNOW THAT LONG ISLAND SOUND IS A RESOURCE OF IMMENSE VALUE--AND ONE THAT IS UNDER INTENSE PRESSURE FROM A BURGEONING POPULATION. I MIGHT OBSERVE THAT PRESSURE ON OUR COASTAL RESOURCES IS A NATIONAL PHENOMENON--THE COUNCIL ON ENVIRONMENTAL QUALITY ESTIMATES THAT BY 1990, OVER 75% OF THE U.S. POPULATION WILL LIVES WITHIN 50 MILES OF THE COASTLINE. THE SOUND, WHICH IS 110 MILES LONG AND 1300 SQUARE MILES IN TOTAL SIZE, HAS A COASTLINE WHICH STRETCHES 577 MILES THROUGH TWO STATES. ABOUT 22 MILLION PEOPLE LIVE IN THE NINE COUNTIES BORDERING THE SOUND. THE WATER FROM 16,000 SQUARE MILES OF LAND IN NEW YORK, NEW ENGLAND AND PARTS OF QUEBEC DRAINS INTO THE SOUND. ACCORDING TO THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, 86 SEWAGE TREATMENT PLANTS RELEASE MORE A BILLION GALLONS OF WASTEWATER INTO THE SOUND EACH DAY.

WHEN PROPERLY TREATED, WASTEWATER FROM SEWAGE PLANTS IS NOT A PROBLEM. IT IS RAW SEWAGE FROM PLANT OVERFLOWS AND MALFUNCTIONS

WHICH CAUSES SERIOUS PROBLEMS. ANOTHER SOURCE IS POLLUTED RUNOFF FROM STREETS AND FIELDS. IMPROPER OR LEAKY SEWAGE HOOKUPS DISCHARGE WASTES ALSO. IT IS THIS CONTAMINATION THAT FORCES CLOSURE OF LOCAL BEACHES LIKE THE HARBOR ISLAND BEACH--WHICH WAS CLOSED FOR 9 DAYS IN 1987 AND 15 DAYS IN 1986. IT IS THIS POLLUTION THAT WORRIES LOCAL FISHERMEN AS THEY OBSERVE THE DEATHS OF THOUSANDS OF MOSS BUNKER FISH, AND PULL UP TRAPS CONTAINING DEAD LOBSTERS.

WE WILL HEAR FROM OUR WITNESSES TODAY ABOUT HYPOXIA, THE DEPLETION OF OXYGEN FROM SOUND WATERS DUE TO EXCESS NUTRIENTS AND PHOSPHATES. AND WE WILL LEARN ABOUT STUDIES OF TOXIC CHEMICALS WHICH FEDERAL AND STATE AGENCIES ARE CONDUCTING TO SEE IF THERE ARE DANGEROUS LEVELS OF LEAD, ZINC, CADMIUM AND COPPER IN SEAFOOD FROM THE SOUND, AND IN THE BOTTOM SEDIMENTS.

YOU AS GOVERNMENT OFFICIALS AND CITIZENS ARE FACING COMPLEX AND COSTLY CHOICES. PROBLEMS OF THIS MAGNITUDE REQUIRE THOUGHTFUL STUDY AND SUSTAINED COOPERATION AMONG DIFFERENT JURISDICTIONS. I COMMEND YOU ON THE PROGRESS YOU HAVE MADE ALREADY WITH THE LONG ISLAND SOUND STUDY (LISS) BEGUN IN 1985. ALSO STATE PROGRAMS LIKE THE WATERFRONT REVITALIZATION AND COASTAL RESOURCES ACT OF 1981 RUN BY SECRETARY OF STATE GAIL SCHAFFER AND COMMISSIONER TOM JORLING OF THE DEPARTMENT OF ENVIRONMENTAL CONSERVATION WILL BE OF MAJOR ASSISTANCE TO YOU IN YOUR EFFORTS. LET ME MENTION BRIEFLY SOME OF THE FEDERAL PROGRAMS WHICH HAVE COME OUT OF MY COMMITTEE WHICH WILL SUPPORT YOUR WORK ON THE SOUND.

CLEAN WATER ACT-NATIONAL ESTUARY PROGRAM

SECTION 317 OF THE NEWLY REAUTHORIZED CLEAN WATER ACT ADDS LONG ISLAND SOUND TO THE LIST OF DESIGNATED BODIES OF WATER FOR

THE NATIONAL ESTUARY PROGRAM. THIS MEANS THAT LONG ISLAND SOUND WILL RECEIVE PRIORITY CONSIDERATION FOR FEDERAL FUNDS UNDER THIS PROGRAM. THE ACT AUTHORIZED $12 MILLION ANNUALLY FOR THIS PROGRAM. IN THE ADMINISTRATION BUDGET THE PRESIDENT ONLY REQUESTED $5 MILLION ANNUALLY.THE CONFERENCE COMMITTEE IS MEETING NOW ON THE APPROPRIATIONS BILL WHICH WILL DETERMINE WHAT LEVEL OF FUNDING IS APPROVED.

HOWEVER, WE CAN COUNT ON A MANDATORY SET-ASIDE FOR THE ESTUARY PROGRAM FROM THE CONSTRUCTION GRANTS FUNDS FOR EACH STATE. IN FISCAL YEAR 1988, 1% OF WHAT WE EXPECT TO BE A $ 2.4 BILLION NATIONAL PROGRAM IN CONSTRUCTION GRANTS IS ALLOCATED TO ESTUARY PURPOSES. 2/3 OF THIS ($12 MILLION) WILL GO TO CORRECT COMBINED SEWER OVERFLOW PROBLEMS IN MARINE BAYS AND ESTUARIES--EXACTLY THE PROBLEM YOU FACE HERE. 1/3 OF THE SET-ASIDE ($8 MILLION) WILL GO TO THE NATIONAL ESTUARY RESEARCH AND MANAGEMENT PROGRAM IN SECTION 317. THIS PROGRAM FACILTATES COORDINATION OF FEDERAL, STATE AND LOCAL AGENCIES TO SHARE RESEARCH AND TO DEVELOP A MANAGEMENT PLAN FOR THE ESTUARY. AS AN EXAMPLE OF WHAT CONCRETE ACCOMPLISHMENTS THIS TYPE OF PROGRAM CAN HAVE, IN CHESAPEAKE BAY, WHICH IS A BIT FURTHER ALONG IN ITS ESTUARY PROGRAM, OFFICIALS HAVE AGREED ON A PLAN TO REDUCE NUTRIENT LOADING TO THE BAY BY 40%.

WE WILL CONTINUE TO WORK TO FUND THIS PROGRAM. MOREOVER, WE ARE JOINING SENATOR WEICKER IN AN EFFORT TO SECURE EARMARKED FUNDING OF $2 MILLION TO THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION AGENCY(NOAA) FOR THE LONG ISLAND STUDY IN THE COMMERCE APPROPRIATIONS BILL.

CONSTRUCTION GRANTS PROGRAM-REVOLVING FUNDS CASH PAYMENTS

ON OCTOBER 15TH I SUCCESSFULLY OFFERED AN AMENDMENT TO THE HUD-INDEPENDENT AGENCIES BILL WHICH REQUIRES THAT THE FEDERAL GOVERNMENT PAY ITS 80% SHARE OF THE REVOLVING LOAN FUNDS TO THE STATES IN CASH---NOT BY LETTERS OF CREDIT AS OMB HAD ANNOUNCED IT WOULD DO. HAD OMB'S POLICY BEEN IMPLEMENTED, THE STATES WOULD HAVE LOST HUNDREDS OF MILLIONS IN INTEREST, JEOPARDIZING THE SUCCESS OF THE REVOLVING LOAN PROGRAM. BOND COUNSEL FOR NEW YORK STATE ESTIMATES THAT NEW YORK WOULD HAVE LOST $254 MILLION IN THE FIRST SEVEN YEARS OF THE PROGRAM, AND AS MUCH AS $1.3 BILLION OVER THE NEXT 20 YEARS. THIS WOULD SEVERELY IMPEDE NEW YORK'S EFFORTS TO COMPLY WITH THE JULY 1, 1988 FEDERAL WATER QUALITY DEADLINES.

MAMARONECK'S PRIORITY FOR CONSTRUCTION GRANTS OR LOANS

I KNOW THAT THE CONSTRUCTION GRANTS PROGRAM IS OF SPECIAL INTEREST TO YOU HERE, SINCE MAMRONECK IS ON THE STATE PRIORITY LIST FOR A 25 MILLION DOLLAR SEWAGE PLANT PROJECT IN FISCAL YEAR 1988, AND FOR A 70 MILLION DOLLAR SEWAGE PLANT PROJECT IN FY 1989. MAMARONECK ALREADY RECEIVED FEDERAL FUNDS FOR A $14.5 MILLION SEWER OUTFALL PROJECT ON SEPTEMBER 30TH OF THIS YEAR. I KNOW TOO, THAT YOU ARE CONCERNED ABOUT THE RATE AT WHICH THE STATE WILL CONVERT FROM A GRANTS PROGRAM TO A LOAN PROGRAM, UNDER THE OPTIONS IN THE LAW AVAILABLE TO THE GOVERNOR. THE CHOICE THAT THE GOVERNOR MAKES WILL DETERMINE WHETHER MAMARONECK RECEIVES A 55% FEDERAL GRANT OR A LOAN. THE STATE DEC HAS JUST ANNOUNCED A SERIES OF HEARINGS ON THIS SUBJECT, AT WHICH YOU SHOULD MAKE YOUR OPINIONS KNOWN. THE CLOSEST HEARING TO YOU WILL BE MONDAY,

NOVEMBER 23 AT 1:30 IN THE WORLD TRADE CENTER, BUILDING 2, ROOM 5885.

I CAN ASSURE YOU THAT I WILL CONTINUE MY EFFORTS ON THE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS TO SUPPORT THESE PROGRAMS WHICH PROTECT THE HEALTH AND QUALITY OF LIFE OF OUR CITIZENS, AND I LOOK FORWARD TO HEARING FROM OUR WITNESSES TODAY.

REMARKS OF MAYOR PAUL J. NOTO
OF THE VILLAGE OF MAMARONECK
OCTOBER 26, 1987 BEFORE THE SUBCOMMITTEE ON
WATER RESOURCES, TRANSPORTATION & INFRASTRUCTURE

I would like to commend Senator Moynihan for holding this public hearing on this very important issue.

The Village of Mamaroneck takes great pride in its waterfront and marine character. We have in the last few years enacted one of the most comprehensive waterfront protection plans in the entire State of New York.

Waterfront protection and public access will be meaningless to us and other shore communities if the Long Island Sound becomes so polluted that it is unfit for aquatic life and recreational use.

The pollution problems confronting the Long Island Sound and its shore communities are two-fold. The first and, in our view, the most immediate is the contamination of our beaches by fecal coliform. This contamination creates extremely high and unsafe bacteria levels that force the Westchester County Department of Health to close down the beaches until the bacteria levels decline.

Based upon extensive testing and day to day observation, the county has concluded that direct stormwater runoff and stormwater related sewage overflows appear to be the most significant sources of coliform contamination for the streams and the Harbor. The specific sources are most likely street litter, animal feces, overloaded and broken sewers and overloaded subsurface sewage disposal systems. The gradual deteriation of old sewer lines, along with the increase in the number of unauthorized sewer line hook-ups, has created a problem that is well beyond our capacity to correct.

The county issued a report in January 1985 which listed many recommendations which we have followed. Unfortunately, the problem is so complex that we simply cannot solve it without assistance of other levels of government and our neighboring municipalities. Because Mamaroneck is at the bottom of the watershed, all of the waste from upstream communities flow into the rivers and streams which then flow into our harbor. While the county insists that the Village of Mamaroneck is the main source of the contamination, we feel very strongly that neighboring communities share some of the responsibility for this problem.

With county cooperation, we will have the enormous responsibility of locating and disconnecting the illegal hook-ups and constructing sewer lines that can be connected. In a community that has only 60 percent coverage of storm drains that task is nothing short of monumental. Unfortunately, the alternative is a polluted sound and no beach.

The second problem is the depletion of oxygen beyond levels needed for aquatic life to survive, also known as eutrophication. To some extent the continued coliform contamination will expedite the eutrophication process, but the primary cause is the continued washing of nutrients into the sound.

There is no doubt that you have heard or will hear different versions of the same problem from many different people at today's hearing.

I would like to make some recommendations for state and federal action that may address these problems:

1. The Village of Mamaroneck is not the only community with deteriorating sewer lines and illegal hook-ups. We are sensitive to it because we are at the bottom of the watershed and we have a beach. If we did not have a beach, we never would have known about this problem. The state has launched an ambitious program to rebuild New York's roads and bridges. I am recommending you launch another ambitious program to rebuild and repair New York's sewer lines and hook-ups. It is somewhat less glamorous, but no less important than safe roads and highways. Specifically, the state and federal government should set aside monies to:

a) Determine where the deteriorating sewer lines are;

b) Repair the main lines;

c) Locate the illegal hook-ups;

d) Disconnect them and rehook them up to a proper line, if necessary.

The program could be administered by the county in concert with the local engineering departments.

As to the problem of eutrophication, the answer is probably more scientific than I can attest to. Clearly by solving the coliform contamination problem, you have taken a giant step forward in slowing the eutrophication of the sound. That will undoubtedly give you more time to find a permanent solution to the eutrophication.

At a minimum, we need a comprehensive federal, state and county cooperative effort to assist municipalities like ours to address this problem. Possible legislative solutions requiring homeowners to certify their sewer hook-ups, prior to the sale of their home, is an option. Additionally, since most people do not know if they have an illegal hook-up, they will require financial assistance in the event that they must disconnect the line.

The bottom line is that the Long Island Sound and all it has to offer is a precious natural resource. We cannot stand by while it continues to be polluted without taking drastic measures. While we are all mindful of the cost of the solution, it pales in comparison to the cost in terms of lost recreational facilities, marine related industry, property values and the overall quality of life in this area that we wish to maintain and preserve for future generations.

Thank you and I applaud your interest.

Senator MOYNIHAN. I take pleasure in welcoming my colleague who represents this area so ably, Congressman Joseph DioGuardi.

STATEMENT OF HON. JOSEPH J. DioGUARDI, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW YORK

Mr. DIOGUARDI. Thank you, Senator.

Senator Moynihan, again, welcome to Westchester County. I want to thank you as Chairman of the Senate Subcommittee on Water Resources, Transportation, and Infrastructure, and Senator Mitchell of the Senate Subcommittee on Environmental Protection for holding today's joint field hearing on water resources and pollution problems affecting Long Island Sound. It would be difficult to select a site more appropriate than Mamaroneck.

I am well aware, Senator, of your long-time support for the cleanup of our Nation's bodies of water, particularly your leadership in seeing that the Long Island Sound receives the Federal attention it deserves.

Having faced beach closings year after year and more frequent lobster and fish kills in more recent years, the Sound as an economical and recreational resource is declining, as we can see. The citizens of Mamaroneck know this better than anybody.

The Federal Government is playing a crucial role in the future of the Sound. The Federal role is not new. Beginning in 1984, Congress appropriated $1 million to study the Sound's water quality problems. In fiscal year 1986 the Sound research effort received an additional $1 million. With the enactment of the Water Quality Act of 1987, the Sound study—as part of the National Estuary Program—was formally recognized by the Federal Government. The Long Island Sound Study was appropriated $2.4 million this past fiscal year—that is, 1987.

While the Federal Government has played a major role in the study, State and local governments, as well as the Interstate Sanitation Commission, played just as important a role. Without the participation of all of these entities the successful cleanup of the Long Island Sound would not be realized.

In order to coordinate efforts at the congressional level, Congressman Bruce Morrison of Connecticut and I established a bipartisan Long Island Sound caucus in the House. We were successful in having all Members of Congress whose districts abut the Sound join in the caucus.

As I am sure you will hear from other panelists who are testifying today, the study has concluded its third year and has identified the major problems confronting the Sound. Those problems are the presence of hypoxia—that is, lack of dissolved oxygen in the water—and toxics that have a detrimental impact on aquatic life. This summer I toured the Sound with County Legislator Diane Keane and others, where we observed the magnitude of the hypoxia problem and the difficulties facing researchers who are trying to pinpoint the sources of hypoxia and develop a cleanup strategy for the Sound.

While I can sympathize with those individuals who want immediate results, I cannot stress enough the importance of the recom-

mendations of the Long Island Sound study. Eventual cleanup of the Sound will require significant amounts of money. Failure to specifically identify the Sound's major pollution contributors could result in the wasting of tens of millions of taxpayers' dollars. We've seen an example of that recently with the Chesapeake Bay, where many taxpayer dollars were wasted. However, some valuable lessons were learned on how to conduct an estuary cleanup study from the Chesapeake Bay experience. The Long Island Sound study represents a thorough, well-coordinated effort that should be viewed as a worthy investment in the Sound's future. Sound researchers are particularly concerned with the problem of hypoxia. Hypoxia is naturally-occurring as a phenomenon during the summer months; however, natural checks have insufficient impact on excessive nutrients—those are nitrates and phosphates—which come from sewage treatment plants that are put into the system, and we have some 40 sewage treatment plants around Long Island Sound. Long-term hypoxia can result and this, in turn, can produce the lobster and fish kills that we witnessed this past summer.

The Long Island Sound study will probably recommend that sewage treatment facilities bordering the Sound be upgraded, some perhaps even requiring more expensive tertiary levels of treatment. But before we begin upgrading sewage treatment plants to tertiary levels it is important that plants like the Mamaroneck sewage treatment plant be upgraded to secondary levels. Mamaroneck is currently in the process of upgrading their facility; however, Mamaroneck is in jeopardy of losing Federal grant funding to achieve that goal. With enactment of the Water Quality Act, the Federal Government will soon be phasing out the sewage construction grant program and begin capitalizing a State revolving fund program. Since it is a phase-out, grant monies will still be available to States until fiscal year 1991. Beginning in fiscal year 1991 Federal monies will be placed in the State revolving fund. In fiscal years 1988 through 1990 States will have the option of either continuing the current sewer construction grant program or taking a percentage of the grant funds beginning to capitalize the State revolving fund. And I'm told that in 1988 and 1989 States may elect to capitalize at 75 percent in 1988, and I believe 100 percent in 1989.

Should New York State elect to capitalize the State revolving fund fully, the communities of Mamaroneck Sewer District stand to lose over $50 million in Federal grant assistance. Needless to say, I and other representatives of Mamaroneck are concerned over the potential of such a costly decision to this area. Other communities across the State will suffer as well.

For that reason I and several of my colleagues in the House have written Governor Cuomo urging that he delay capitalization of the State revolving fund. Senator, we would appreciate your support and urge you to join us in this effort as well.

Allow me to take this opportunity to underscore the role of the State governments of New York and Connecticut. After the Long Island Sound study is completed and recommendations have been made it would be up to the State governments to implement those recommendations. Accordingly, State representatives should be involved in the decision-making process from the primary stages. Recently an interstate Long Island Sound caucus was formed by Con-

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necticut and New York State, the Senators from both States. I've got to applaud those Senators, and particularly Susie Oppenheimer, for participating in the caucus. Unfortunately, several Senators from New York felt that the interstate caucus was supported by Governor O'Neill from Connecticut and lacked Governor Cuomo's support. I have written to the Governor requesting that he follow Governor O'Neill's lead and endorse the caucus. Again, Senator, I would encourage you to use your influence with the Governor.

Earlier I stated that I sympathized with those who want immediate results, but that it is important that the Long Island Sound study be completed. This is not to say that some cleanup efforts at this time are out of place. On the contrary, Westchester County and the Village of Mamaroneck recently received a report that they had commissioned making recommendations for the cleanup of the Mamaroneck harbor. Upon County Legislator Keane's suggestion, I wrote a letter to the cochairmen of the Long Island Sound Management Committee requesting that the Long Island Sound study implementation cleanup monies under section 205(l) of the Water Quality Act of 1987 be allocated to assist in the cleanup of Mamaroneck Harbor. With the Mamaroneck Harbor Pollution Study as a blueprint, I cannot think of a more appropriate recipient of these section 205(l) funds.

In conclusion, the success of the Long Island Sound study and eventual cleanup efforts depend on interaction and the support of Federal, State and local governments. The Federal Government is playing the primary role in the study areas of the Long Island Sound cleanup effort. The State and local government efforts will play the primary role in the implementation phase. The Interstate Sanitation Commission has regulatory responsibility over the Sound, as we know. Holding today's hearing is testimony to the need for government interaction at all levels.

I thank you, Senator Moynihan, for inviting me to participate. I look forward to working with you in the future on this important issue.

Senator MOYNIHAN. If any of the members of our audience who are present are not aware of it, Mr. DioGuardi is a very accomplished—and I think the only—Certified Public Accountant in the United States Congress.

Let me say that getting the Long Island Sound study going is of the first consequence. Senator Weicker and I are pushing it. It is the National Oceanographic and Atmospheric Administration that will have to do it.

A trivia question. New York State borders on six States. Which are the six States? New Jersey, Pennsylvania, Massachusetts, Connecticut, and Vermont—no, not New Hampshire; that's five, right? All right, where is the sixth State? I'll start again. New Jersey, Pennsylvania, then going up the eastern tier, Connecticut, Massachusetts, Vermont. What's the sixth State? The sixth State is Rhode Island; good. Right there in Long Island Sound. It lies right there on the Sound. We ought to get Rhode Island, actually, into this process. They are part of the Sound.

Mr. DIOGUARDI. Senator, Claudine Schneider has joined the caucus in the House and she has played an important role because

she's a senior member of the Committee on Merchant Marine and Fisheries, and I'm delighted that she's on the caucus with us.

Senator MOYNIHAN. Yes.

It needs to be made clear that the Federal role is now being phased out of the clean water program. I don't have to tell my colleagues that we have a water program, and all because we overrode President Reagan's veto. He vetoed the bill which we passed in the last Congress. I was on the conference committee and we went to great pains to accommodate the Administration. They vetoed it anyway, and the first thing that we did this year was to override the veto. But in that override I think we lost sight that it was, in fact, a bill that ended the program. We have 4 years of grants, as you say, and then we go into a revolving loan program. I have arranged on the Senate side, and I hope you will do the same on the House side—the Administration wants to make the Federal contribution in the form of letters of credit as against an actual cash infusion. We intended cash. We meant cash. As with many things in Washington these days, what the law says is one thing and what the Administration does is another. But in this case I think we really must hold them because, as you would know and understand and be able to explain much better than I, the long-term consequences would be about $1.3 billion to the State, I think.

Mr. DIOGUARDI. Well, I know they were anticipating interest monies on the cash that was to be provided. It would cost the localities a lot more if they made these letters of credit, but obviously it's an attempt to deal with the shrinking levels of cash we have in the Federal Government. But I think this is not the way to go about it.

Senator MOYNIHAN. Not the way, for sure.

Mr. DIOGUARDI. We appreciate your help on that, Senator.

Senator MOYNIHAN. We amended the HUD and Independent Agencies bill. Senator Proxmire said he normally wouldn't do this, but it won't happen for 4 years.

Do you think you can get that in the House?

Mr. DIOGUARDI. We will try very hard. That's one of the issues that we will bring up next in front of the House caucus.

Senator MOYNIHAN. Because it is literally the last large issue of resources out of Washington, $1.3 billion, at stake.

Mr. DIOGUARDI. Just about. And it would affect this area a lot.

Senator MOYNIHAN. So we will count on you.

Mr. DIOGUARDI. You have my pledge on that.

Senator MOYNIHAN. Thank you very much for coming.

Mr. DioGuardi mentioned Senator Oppenheimer's involvement. She is not able to be here but she gave us testimony which I would like to include in the record following Representative DioGuardi, who mentioned her.

[The statement referred to follows:]

Statement submitted by Senator Suzi Oppenheimer--Field Hearings of the Senate Subcommittee on Water Resources, Transportation and Infrastructure Regarding Long Island Sound Pollution--
October 26, 1987, Mamaroneck, NY.

I AM VERY PLEASED TO WELCOME SENATOR MOYNIHAN TO MAMARONECK AND TO THE SOUND SHORE AREA OF WESTCHESTER WHICH I REPRESENT IN THE NEW YORK STATE SENATE. MY DISTRICT INCLUDES SEVEN COMMUNITIES SETTLED ALONG OVER 20 MILES OF COASTLINE AND THE LARGER AJOINING COMMUNITY WHICH SHARES IN THE PLEASURES AND THE PROBLEMS OF LONG ISLAND SOUND.

THE ISSUES WE FACE HERE ALONG THE WATER'S EDGE GROW MORE CRUCIAL DAILY. THEY ARE, TO BE BRIEF: TOXIC CONTAMINANTS, SEWAGE SPILLS, THE EFFECTS OF HYPOXIA, THE DEPLETED FISHING INDUSTRY, THE SHRINKING RECREATIONAL OPPORTUNITIES, THE DEVELOPMENT BOOM, AND THE THREAT TO THE LAST OF OUR SALT AND TIDAL MARSHES. ALL OF THESE ISSUES ARE CLOSELY INTERRELATED. ALL OF THEM IMPACT SERIOUSLY ON EACH OTHER. ALL OF THEM HAVE A REAL HUMAN DIMENSION TO THEIR PROFOUND ENVIRONMENTAL CONSEQUENCES. ALL THESE PROBLEMS, LIKE THE WATERS OF LONG ISLAND SOUND DO NOT RECOGNIZE STATE OR LOCAL BOUNDRY LINES.

WE ARE AT A CRITICAL JUNCTURE IN THE HISTORY OF OUR INVOLVEMENT WITH LONG ISLAND SOUND. WE MUST REVERSE THE DAMAGE THAT HAS BEEN DONE TO THE WATER, THE COASTLINE, THE FISH AND THE WILDLIFE BEFORE THAT DAMAGE BECOMES IRREVERSABLE. I BELIEVE THAT WE CAN. COOPERATION IS ESSENTIAL TO OUR SUCCESS, HOWEVER. WITHOUT IT, VITAL INFORMATION, RESOURCES, AND GOVERNMENT INTERACTION DO NOT OCCUR. PRECIOUS TIME IS LOST.

IN THE SPIRIT OF COOPERATION AND COMMITMENT, I HAVE JOINED WITH SENATOR JOHN ATKIN OF CONNECTICUT IN THE NEWLY FORMED LONG ISLAND SOUND CAUCUS, MADE UP OF SENATORS FROM NEW YORK, CONNECTICUT AND RHODE ISLAND. THROUGH THE CAUCUS WE, AS ELECTED OFFICIALS ON THE STATE LEVEL, CAN MONTIOR, ADVISE AND PROVIDE LEGISLATIVE ASSISTANCE TO OUR DEPARTMENTS OF ENVIRONMENTAL CONSERVATION AND PROTECTION. WE CAN HELP ENSURE THAT THEY WORK TOGETHER WHENEVER POSSIBLE IN THE MOST PRODUCTIVE AND EFFICIENT MANNER. AND, THROUGH A SERIES OF PUBLIC HEARINGS IN NEW YORK AND CONNECTICUT, THE CITIZENS OF BOTH STATES CAN DETAIL THE PROBLEMS THEY FACE LIVING ALONG THE SOUND AND FORGE CLOSER LINKS AMONG THEIR COMMUNITIES.

I HAVE SPOKEN WITH GOVERNOR CUOMO'S CHIEF ADVISOR ON ENVIRONMENTAL ISSUES ABOUT THE LONG ISLAND SOUND CAUCUS. THE GOVERNOR HAS PLEDGED HIS FULL COOPERATION AND THAT OF THE RELEVANT STATE AGENCIES. WITH HIS HELP AND THAT OF GOVERNOR O'NEILL OF CONNECTICUT, THE CAUCUS WILL PROVIDE A MAJOR VOICE FOR THE COMMUNITIES OF WESTERN LONG ISLAND SOUND.

IN ADDITION TO THIS INNOVATIVE TRI-STATE EFFORT, I PROVIDED FUNDING FOR THE LONG ISLAND SOUND ENVIRONMENTAL CONFERENCE AT SUNY PURCHASE THIS FALL. THE CONFERENCE HAS, FOR THE FIRST TIME, INCLUDED MAJOR ENVIRONMENTAL ORGANIZATIONS IN WESTCHESTER, CONNECTICUT AND LONG ISLAND. THIS WILL INCREASE THE COORDINATED APPROACH TO THE REGION'S ENVIRONMENTAL PROBLEMS THAT IS SO IMPORTANT TO OUR SUCCESS.

THERE ARE SEVERAL SPECIFIC ENVIRONMENTAL ISSUES OF GREAT SIGNIFICANCE TO WESTCHESTER AND ITS POSITION ON LONG ISLAND SOUND. THE UPGRADING OF THE MAMARONECK SEWAGE SYSTEM AND THE ELIMINATION OF STORM SEWER OVERFLOW IS A MATTER OF UTMOST IMPORTANCE TO THE DISTRICT. I HAVE TESTIFIED IN SUPPORT OF THE

DEPARTMENT OF STATE EFFORTS TO DESIGNATE COASTAL FISH & WILDLIFE HABITATS ON THE SOUND: THE MARSHLANDS CONSERVANCY, PLAYLAND LAKE AND MANURSING ISLAND FLATS, THE PREMIUM RIVER-PINEBROOK WETLANDS AND HUCKLEBERRY ISLAND. SUCH WETLANDS ARE CRUCIAL TO PRESERVING OUR ECOSYSTEM. IT IS EQUALLY IMPORTANT TO LIMIT DEVELOPMENT ON THE SOUND, INCLUDING TITUS MILL POND AND DAVIDS ISLAND. AND, I AM ATTEMPTING TO PRESERVE ESTABLISHED RECREATIONAL AREAS LIKE DAVENPORT NECK FROM INTRUSION.

PUBLIC AWARENESS AND CONCERN OVER THE POLLUTION OF LONG ISLAND SOUND HAS GROWN TREMENDOUSLY IN THE PAST FEW YEARS. ELECTED OFFICIALS, GOVERNMENTAL AGENCIES, MAJOR EDUCATIONAL INSTITUTIONS, CONSERVATIONISTS AND ENVIRONMENTAL GROUPS ARE ALL COMMITTED TO REVERSING THE TIDE OF POLLUTION. THE ENVIRONMENTAL PROTECTION AGENCY IS IN THE MIDST OF A MAJOR EFFORT TO STUDY LONG ISLAND SOUND AND DEVELOP A PLAN TO PRESERVE AND PROTECT ITS VALUABLE RESOURCES. THERE IS, AS SENATOR MOYNIHAN'S PRESENCE INDICATES, STRONG CONGRESSIONAL INTEREST. AND, THE TWO STATES WHICH FRONT THE TROUBLED WATERS OF THE SOUND ARE VITAL PARTICIPANTS THROUGH THE NEW YORK DEPARTMENT OF ENVIRONMENTAL CONSERVATION AND THE CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION.

THE MORE WE ARE ABLE TO TIE THESE EFFORTS TOGETHER, THE MORE WE INCLUDE THE CITIZENS OF WESTCHESTER AND THE CONNECTICUT SHORE IN OUR WORK, THE SOONER WE WILL ALL SEE THE REGENERATION OF LONG ISLAND SOUND. WE LIVE BY THE SOUND BECAUSE WE LOVE HER, EVEN NOW WHEN SHE IS IN SUCH DESPERATE NEED OF HELP. I LOOK FORWARD TO THE DAY WHEN LONG ISLAND SOUND IS THE PURE, CLEAR, SPARKLING BODY OF WATER SHE ONCE WAS AND WE KNOW SHE TRULY DESERVES TO BE.

SO/jrb

Senator MOYNIHAN. I see that our distinguished County Executive, the Honorable Andrew P. O'Rourke, is here. I am very much aware of your time and am very grateful for your coming across the county for this occasion. There is something slightly disconcerting about looking at the unmistakably Irish face of Andy O'Rourke over a sign that says "Congressman DioGuardi."

Mr. O'ROURKE. We Italians have to stick together.

Senator MOYNIHAN. May the Chair indulge himself the privilege of wishing the County Executive a happy birthday without too closely inquiring as to which it was.

STATEMENT OF HON. ANDREW P. O'ROURKE, COUNTY EXECUTIVE, WESTCHESTER COUNTY, NY

Mr. O'ROURKE. You know, Senator, when you began asking which States New York bordered on, with your well-known sense of humor, I thought you were going to end up saying that it was bordering on the state of confusion over what to do about the Long Island Sound because it is a serious problem for all of us. I know that you and Mayor Notto and Legislator Keane were down at the harbor a short while ago, and I thank you for doing that, for looking at it personally. And I thank you for this invitation to testify this morning on the pollution problems of Long Island Sound.

I welcome you here on behalf of the county, and I also welcome our State Commissioner of Environmental Conservation, Mr. Jorling. Names mean very little in this business; it's really what we're trying to do, I guess. I welcome you and the Commissioner to probably one of the most picturesque shorelines and shoreline communities in the State of New York. It is probably fitting that we are gathered here in Mamaroneck where our ties to the sea are so evidenced by the beautiful shoreline, marinas, boating industry, and beaches. Unfortunately, Mamaroneck—more, perhaps, than the rest of our shoreline communities—has had to endure repeated instances this last summer of fish kills, nuisance algae, beach closings, etc.

Westchester, like our neighboring New York and Connecticut communities, has been working to better understand and solve the water quality problems associated with the Long Island Sound and to solve the water quality problems in general, but certainly on that particular area. The focus has usually been condensed to our respective back yards. Mamaroneck worries about Mamaroneck, etc. The serious oxygen depletion of the Sound experienced this past July sent shock waves, however, to all the communities along the Sound and indeed, across the Sound into Long Island. It has resulted in a heightened awareness of the fragile environmental conditions of this precious resource that we just assume is always going to be there and will always be pure.

I remember as a child, as a boy growing up in New York City, swimming in the Hudson River. The only thing anyone ever told me was to watch out for logs which might be below the surface. We need much more care of these precious resources.

One group, however, was not surprised at what's been happening to this resource—the scientists who have been working on the Federally-funded Long Island Sound study. And let me add a footnote

on that. We always act as though Federally-funded studies are somehow a gift from Heaven. You and I know that New York State sends a tremendous amount of money to the Federal Government, and I know you and all of us in government are involved in the process of trying to get back some fair share of the money that we send southwest to Washington. We have certainly not achieved that at this point but I know you're working on it and I am happy that Congressman DioGuardi, with his accounting background, is working on it.

The scientists have been working for the last three years at gathering data and assessing the environmental setting and problems for this region. As you know, there is a regional approach to this problem, and undoubtedly that's the way it has to be solved, on a regional basis. But that can only be successful if we can secure commitment and cooperation at the local level as well as the State and Federal level.

Westchester County has undertaken major steps over the last several years to evaluate and reduce pollution problems in Long Island Sound. Namely, we have completed county-operated secondary treatment plants at New Rochelle and Blind Brook, thanks to Federal grants. We have upgraded and rehabilitated pumping stations and sewer systems. We have ongoing construction of an upgraded secondary treatment plant at Portchester.

In addition, we have redesigned the existing Mamaroneck sewage treatment plant, and our Health Department has maintained a local Sound monitoring network to assure acceptable water quality for bathing and recreational activities. Also, our county agencies have been actively involved in participating with the technical advisory and public participation committees of the Long Island Sound Task Force.

A just-released study, the Satterthwaite Report, jointly funded by Westchester County and the Village of Mamaroneck, addressed the pollution problems of Mamaroneck Harbor and its drainage basin. Based on these findings and recommendations we are proceeding with myriad programs and county efforts and will be calling on our local municipalities to participate. As a matter of fact, Legislator Keane and I have a meeting this afternoon with those communities that upper riparian to this area to talk to them about things like dog leashing, their own sewer systems, cleaning them out, because all of that ultimately ends up down here on its way into the Sound.

Later this year I will be calling for a Long Island Sound committee of other county executives. I think it's very, very important that the county executives on Long Island ourselves, on this side, have to get together to discuss our mutual concerns and efforts.

So much for local cooperation and commitment. It's there, I guarantee you, and the money is there also, whatever we can afford to spend. Let me talk for a very brief moment about what I see for State and Federal roles.

The existing Federal support must be provided as scheduled. The second year funds for the Long Island Sound study were delayed and the program lay dormant for almost a year. I know, Senator Moynihan, that you were instrumental in getting this project the necessary funds and I urge you to continue your important support of this study.

The Water Quality Act of 1987, which was so long in coming, amends the Clean Water Act. It sets forward a schedule and mechanism for the transition to full State and local responsibility for the current construction grant program. As Congressman Dio-Guardi said before—I don't want to reiterate what he said before, but it's very, very important on the county level. The Governor notified the United States Environmental Protection Agency of his intention to transfer the maximum amount of the State allotment to a State water pollution program revolving fund before the date when this is called for and mandated by the Federal legislation.

This will eliminate any new construction grants. This must be approved by action of the State Legislature. Should this occur, the county stands to lose approximately $85 million in grants for construction of the Mamaroneck water treatment plant. The county will be entitled to apply for a loan, indeed, even though the details of that loan program are not available—i.e., my comment that we border on the state of confusion.

It is our understanding that the loan would be offered at a third below the county's bonding rate and would be payable across 20 years. Obviously, this would place the entire financial burden for a secondary source treatment plant on local governments, resulting in a significant tax burden on the people in the district. To the people in the district we're saying that the sewage tax is going to quadruple because we don't have that loan program. It is going to go up from $125 to perhaps $500 a year.

Senator MOYNIHAN. If we don't?

Mr. O'ROURKE. If you don't.

Senator MOYNIHAN. But if we do?

Mr. O'ROURKE. If you do, then it stays where it is. I think that's very, very important.

Senator MOYNIHAN. It's important that we do?

Mr. O'ROURKE. It's as important as your remaining in office.

Senator MOYNIHAN. All right. Well, I want you to work full-time at that, believe me.

Mr. O'ROURKE. The technical decisions regarding ultimate—and unfortunately it's something I have no control over, I want you to know. This is a matter that if there is no Federal grant program, if it stops at the State level and becomes a loan, then by sheer act of what's happening the taxes in this area will quadruple on the people that are paying them and they're going to wonder who is responsible for that.

The technical decisions regarding the ultimate treatment levels required for the plant have undergone a time-consuming though important State and Federal review process. Through no fault of our own, we now stand to lose what could have been ours a year or two ago because of technical decisions that had to be made, important but time-consuming technical decisions.

Let me finally turn to something that I think all of us had best be concerned about, the non-point source control.

While scientific studies of the Sound are continuing under a current Federal grant, we do not know enough about all of the sources of pollution loadings into the Sound, including the non-point sources—storm water runoff, illegal dumping, illegal house connections, sewage—as well as the point sources that we do know about.

Much effort has been spent over the last 20 years in upgrading municipal sewage treatment facilities with only a fraction dedicated to study of non-point remediation. These non-point source problems are particularly difficult to solve and we need to give far greater attention to them. As I mentioned about Legislator Keane and myself meeting this afternoon, this is one of the things we're going to work on. People that are in districts all over the community, whether they are on the shoreline or not, should look to what they are doing in their own sewer systems that ultimately impacts on the people that have the luxury and the pleasure of looking at the Sound because they live there. It can't be solved by just the Sound communities alone.

The Federal Government now provides grant funds to State and local agencies for implementing such non-point source programs, but none so far has been allocated to the Long Island Sound problem. We call upon the Federal Government, therefore, to continue appropriations in this section of the Clean Water Act, and for the State Department of Environmental Conservation to earmark non-point source funds to address the problems of Long Island Sound.

It is my belief, Senator, that at every level of government, whether Mayor Notto, Legislator Keane, myself, Congressman DioGuardi or you—if we work together, that the day will come when the only problem with swimming in the Sound will be looking out for the logs. Thank you very much.

Senator MOYNIHAN. Thank you.

First, can I just say that there was $400 million; we put it into the Clean Water Act, authorized for non-point sources. We haven't gotten an appropriation yet; we're fussing with OMB, and we will go on fussing. But it's in the law and we've got the money. That's becoming a major issue in the Great Lakes as well and the Canadians have been pressing us, as properly they ought, and it's the logical next step.

Two things, if I can. One is to say that we have this system of Federalism, and in a curious way it unites localities to their States and the States to the Federal Government, but we've never been good enough at crossing State lines. New York State under Al Smith in the 1920's did pick up the New York Port Authority from New Jersey, and that's been a great success. But we need to learn to do more of this parallel working.

You just said that the county executives along the Sound are thinking of forming a——

Mr. O'ROURKE. Well, I'll be calling that meeting, probably sometime in December.

Senator MOYNIHAN. Good for you. Good for you. Just before you came in I mentioned that it is now at the point—or will be in 2 years' time, next census—that 75 percent of the population of the country lives within 50 miles of the coastline, and the pressures on these arrangements are increasing and they just need to be intelligently handled by intelligent and capable public people. But on the Sound—22 million people live on Long Island Sound.

I don't want to say it, but I would think that if you add up North Dakota, South Dakota, Nebraska, Wyoming, Montana, and Colorado, you might just get 22 million people. Those are the Great Plains.

I don't know about the State's decision. I most certainly want to find out about it. I suppose it's a trade; if they convert to the loan program early they get more loan volume. Mr. Jorling is going to be testifying later on and we will ask him and get that straight.

The other thing I wanted to ask was that, on the Satterthwaite report—is that basically the issue of pitting the upper riparian——

Mr. O'ROURKE. Well, what we were trying to do, Senator, was find out as much as we could about the pollution problem of Mamaroneck Harbor. One of the things we found out, for example, is that our sewer plant is not a major causative factor in producing——

Senator MOYNIHAN. Well, it's two miles out. It's the runoff from upstream.

Mr. O'ROURKE. Right. I really think what we're dealing with is a problem of humanity—as you point out, the great amount of it living within a short distance. What would have been acceptable at the turn of the century, when there were a lot less people, not to worry about dog droppings, not to worry about sewer connections, is just no longer acceptable. Every community bears a burden if they in any way are involved in producing waste water that goes this way, toward Mamaroneck, in helping Mamaroneck and the County of Westchester solve those problems. So I think an important part of that was to focus on something very concrete that we can do at a local level.

So when I meet with the local officials this afternoon we intend to ask them to look at their statutes, to upgrade their statutes dealing with pets, to make sure that they have a program out there on their drains because that's where the germs flourish, and then eventually the water comes along and brings it all this way.

So I think there's a lot we can do. We definitely need the Federal grants. Westchester has had, I think, the most ambitious program, started by my predecessor and perhaps even his predecessor before him, to upgrade waste water treatment. If the chilling hand of having to borrow money to do this hits us, even though it may be backed up with the Federal Government and the State government to see that that happens, we are not going to go forward in the same way we have in the past, I guarantee you.

Senator MOYNIHAN. That's fair enough.

In the Water Resources Act during the last half of the 99th Congress we did get the flood control provisions for the Mamaroneck River which is now authorized in the law, and the Corps of Engineers is doing its work. We just need to get the appropriations. It's time we did. I don't want to be autobiographical, but I'm the first easterner in history to chair the Subcommittee on Water Resources of the Senate. In that job, Senator Kerr of Oklahoma made Muskogee a seaport. It only cost $2 billion, but when you figure what America has done for Muskogee—I mean what Muskogee has done for America—it seemed little enough that America could do for Muskogee. But if they can make Muskogee, Oklahoma a seaport, why, we can do something about the Mamaroneck River, I should hope.

May I just say what a pleasure it is to see someone with the great capacity to think about what's going to happen to the next generation and the generation beyond that. A little episode like the

closing of the beaches this summer was just a little hint that says, this is what's coming if we don't act. The most difficult thing in government is to do things that really won't have consequences—that will prevent things from happening. And if these are prevented, nobody knows it. Very few people get credit for doing things that prevent bad things from happening, but you are doing it. You know what you are doing, and some of us do it well, and we thank you, sir.

Mr. O'ROURKE. Thank you, Senator. I think being a precursor as opposed to being reactive is always dangerous, so we want to be very careful about that. But on the other hand it is necessary to do this, and I congratulate you and your committee for being here.

Senator MOYNIHAN. You're very kind.

You mentioned that Mr. Jorling would be able to be here; good morning to you, sir, and maybe you'll help us with what Mr. O'Rourke asked about. A couple of things have been raised about the States' plans and the States' arrangements. We have your testimony which we will put in the record and you can read it or summarize it or do exactly as you wish.

STATEMENT OF HON. THOMAS C. JORLING, COMMISSIONER, NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Mr. JORLING. Thank you, Senator Moynihan. I am Tom Jorling, Commissioner of the New York State Department of Environmental Conservation. I appreciate this opportunity to appear before you this morning; it's the first opportunity since I became Commissioner to appear before your congressional committee on a matter relating to the State of New York, and I think it's fitting that it be not only on this subject, but that it be held here.

I do have a statement which I'll try and abbreviate so that we can pursue questions on some of the matters that have been raised.

The Long Island Sound is one of the most important estuaries along the Atlantic Coast. To New Yorkers it is a popular recreational area for sport fishing, boating and swimming and supports an active commercial fishing industry generating approximately $20 million annually.

Yet, rapid population growth in the Sound's watershed has led to increased threats to the environment. Approximately one billion gallons per day of municipal wastewater flows from New York and Connecticut facilities into the Sound.

Senator MOYNIHAN. Well, that's a number, isn't it?

Mr. JORLING. That's a large number.

Senator MOYNIHAN. One billion gallons.

If anyone would like to know what a billion is, a billion minutes ago St. Peter was 32 years old.

Mr. JORLING. Indirect and direct industrial discharges, combined sewer overflows, urban storm water runoff, and agricultural and construction runoff also contribute to the pollution loads.

Maintaining and protecting a healthy and functioning ecosystem in the face of these challenges is going to take the cooperation and intense efforts of all public authorities and the long-term commitment of the people.

It is not surprising that the marine resources which normally thrive in the Long Island Sound are the most severely affected by the stress currently being experienced in these waters. For example, one of the biggest problems in the Sound is the pollution of shellfish-growing waters. Many shellfish areas are closed because of fecal coliform contamination, usually from sewage treatment plant discharges, from marine vessel discharges, and from storm water runoff. The closures occur predominantly now in the western basin but can be found as far east as Mattituck Creek in eastern Suffolk County. Almost 10 percent—over 40,000 acres—of New York's Sound waters produce shellfish that are unfit for human consumption. Greater than 50 percent——

Senator MOYNIHAN. Say that once again.

Mr. JORLING. Yes. Almost 10 percent—over 40,000 acres—of New York's Sound waters produce shellfish that are unfit for human consumption. That is, they are sanctioned from the taking of these resources.

Greater than 50 percent—nearly 36,000 acres—of New York's bays and harbors that border the Sound are also closed to shellfishing. This number is especially significant since it is the tributaries, coves and nearshore areas that support the most productive shellfish beds.

These figures not only reveal resource values lost. They provide a measure of how stressed the Long Island ecosystem is.

This summer we experienced not only the usual menhaden kills but also multi-species fish kills caused by the severe hypoxic events of July and August. Lobsters in pots, the young of winter flounder, and other species were unable to escape the area of low dissolved oxygen and died. These issues of toxic contamination and hypoxia are being fully explored in various components of the Long Island Sound study as well as by ongoing efforts of State and county programs.

What these examples indicate is the necessity of viewing the Sound as part of a larger ecosystem. For instance, if we are concerned about the Sound it is important to protect Long Island and Connecticut wetlands. It is necessary to control discharges into tributary watersheds and to maintain buffering landscapes around the Sound.

A major effort to control toxic releases into the Sound is the Industrial Pretreatment Program, supplemented by the Department's new Whole Effluent Toxicity Testing Program. Industrial pretreatment programs are required for municipal sewage treatment plants which discharge in excess of five million gallons a day. Eleven New York facilities discharging into Long Island Sound fall into this category. Nine of them are in the first stages of implementing EPA-approved pretreatment programs; two are ready to begin compliance activities. The Department of Environmental Conservation or EPA or both have initiated enforcement action against facilities which have not begun implementing approved programs. Moreover, environmental groups are exercising their rights under section 505 of the Clean Water Act to bring citizens' suits against facilities which have not yet complied with this requirement.

Mr. Chairman, I am skipping extensively over the prepared remarks and would like to close by restating that the solutions to the

problems of the Long Island Sound are partially within the grasp of individual State and local governments. New York will continue to marshall every available resource to control wastewater discharges into Sound waters and to develop creative programs to restore and preserve our marine resources. Some solutions, however, will require the assistance of the Federal Government. The Long Island Sound Estuarine Study is a prime example of various Federal and State interests working under one umbrella to address common concerns. Several weeks ago, Governor Cuomo submitted the nominating applications to officially include Long Island Sound and the New York Harbor as subjects for coordinated study and assessment.

Another example of Federal-State partnership is the effort which you yourself have made to ensure that sufficient Federal funding is provided to States to attain the July 1, 1988 water quality deadlines mandated under the Clean Water Act.

Let me take this opportunity to express my gratitude for your amendment to the fiscal year 1988 HUD-Independent appropriations bill which requires that sewage treatment plant construction funds be paid to the States in cash and not by letters of credit. This amendment will save New York State approximately $1.3 billion over the next 20 years, putting within our grasp many more construction projects than would have been allowable under the OMB letter of credit scheme. We are mobilizing environmental officials in other States to work on behalf of the Moynihan amendment in the House-Senate conference committee and on final passage by both chambers.

On behalf of New York State and all the localities which will ultimately benefit, and especially the people who will gain measurably from a clean environment, I want to thank you for your leadership on this issue.

Senator MOYNIHAN. Thank you, Mr. Jorling.

Earlier Mr. DioGuardi said he would be at work on this. I guess it does take, as my friend knows, lobbying the conference committee. I'm not on that conference committee.

Are you, by any chance?

Mr. DIOGUARDI. No, I'm not.

Senator MOYNIHAN. Well, that's what you make friends for.

Joe, would you like to ask the Commissioner some questions? You had some thoughts about this subject and what they're doing up there in Albany in their planning.

Mr. DIOGUARDI. Well, we've been in touch already on this, and I appreciate your efforts. We certainly need an ever-enhanced and increased partnership between the State and the Federal Government.

I have no specific questions. I just appreciate your testimony. I am glad to see you here in Mamaroneck.

Mr. JORLING. Thank you.

Senator MOYNIHAN. I guess we're going to have to learn to live with the reality that the Federal Government is getting out of the business. That bill we passed—and it was vetoed—was the last bill, 4 years of grants and then a revolving loan program. We are the ones most directly involved, and in the end we're going to have to do this pretty much on our own.

Knowing what to do is still a major issue. The dynamics of the Sound are not easy; as I say, where backwater flows into this watershed—did you say that two percent of—on a given day, two percent of the sewage output of New York City leaks into the Sound?

Mr. JORLING. That's correct.

Senator MOYNIHAN. I saw that in your testimony somewhere.

Mr. JORLING. Yes.

Senator MOYNIHAN. Yes, "in excess of two percent of New York City's total sewage flow is leaking into the estuary due to malfunctioning regulators, pump stations, or plant components." New York City?

Mr. JORLING. Yes. The entire New York City system, Mr. Chairman, on an average day, that's the percentage that leaks into the system. And that's during low flow periods, not during runoff, during which the discharge rates are much higher.

Senator MOYNIHAN. Well, that's an unacceptable rate. If you could turn that into a portion of your billions of gallons—that's not planned; that's not provided for; at some levels that's not even legal. I suppose there's some error in any system of that kind, but isn't that a large error?

Mr. JORLING. It is a large amount, given the fact that New York City's flows are very large. Two percent is itself large. It's larger than most of the flows through most of our systems across upstate New York.

What it reveals among other things is that these systems are complicated, they're extensive, and they require operation and maintenance care in order to perform to their design specifications. It requires constant vigilance. It requires management and commitment of authorities, local authorities, to maintain these facilities in as proper an operating condition as is possible.

Senator MOYNIHAN. And the problem is that you don't see the mistakes. It takes a very high order of good government to pay attention to things that no one quite knows about or can quite visualize. They don't really know exactly what it is you're talking about.

But that suggests to me that the city has to be brought into these conferences.

Mr. JORLING. No question about it.

Senator MOYNIHAN. No question.

Mr. JORLING. I'd like to just make a comment on that, Senator. The importance of the study phase of what we're doing here on Long Island Sound cannot be understated because we need a circulation model. We're not sure at this point of the effect of the East River, and even the Hudson River which is connected to the East River by the Harlem River. These are like tidal basins; these are not really rivers. There is an ebb and flow and we're not sure at this point what effect the raw sewage that we know of being dumped into the Hudson River has on the Long Island Sound. While we might find people saying, "Enough study of this; get on with implementation," we have to resist that to the extent we can because before we spend tens of millions of dollars we need to have a circulation model and a water quality model which we don't have at this time.

Senator MOYNIHAN. You are coming out forthright in favor of knowing what you're doing?

Mr. JORLING. Exactly.

Senator MOYNIHAN. It's been known to help.

Mr. JORLING. If I might perhaps interject a different note. New York City is not in compliance with the law, but many communities in Westchester County as well are not in compliance with the law. Both sets of communities are subject to enforcement actions by the Department and EPA, and we hope to prod them in the direction of compliance.

The city has made some significant advances. They now have no raw discharges for the first time in the history of the City of New York.

Senator MOYNIHAN. Let's record that.

Mr. JORLING. The Red Hook and North River plants have gone on line. But there is still a great deal of work to do. Oftentimes, requests for more information can be used as a way of avoiding present expenditures and to occasion delay. It's important to know that these massive flows from all of these communities—as you point out, the population densities associated with these harbor and estuarine areas is very high, and it's important that we apply the minimum standards for control of pollutant discharges here just as we do throughout upstate New York as well. And that's one of our first targets, to bring these communities into compliance with that minimum standard that is called for by July 1.

Senator MOYNIHAN. I would like the record to show once again what Commissioner Jorling just reported, that for the first time in the history of New York City no raw sewage is being discharged into the waters surrounding New York City. We brought the North River Plant in 12 years and one billion dollars over budget, but we did. And with that, we can now look to this leakage problem that you're talking about.

Commissioner, we thank you very much for this.

Mr. DioGuardi, would you like to ask some questions?

Mr. DIOGUARDI. Again, I just want to thank the Commissioner for his diligence. You sent me a letter on October 9th which was an early warning system to me on the issue of the letters of credit, so we're going to be working with you and the Senator's office to be sure that we can head that one off at the pass.

Senator MOYNIHAN. Thank you. It's just always a joy to see an energetic young Commissioner arrive in my State. We welcome you to all the trials ahead.

Mr. JORLING. Only fellow white-haired persons call each other young.

Mr. Chairman, it might be helpful if I did indicate something about the State's revolving fund and the State's posture with regard to this.

Senator MOYNIHAN. Yes.

Mr. JORLING. It is an exceedingly complicated area and one that, as you point out—the grant program is ending and it is important that the State of New York do the best job it can to put itself on a financial footing that will enable the State of New York and all of the needs of the State of New York to be accommodated.

Under the needs formula established by EPA, for instance, we have remaining in New York $11 billion worth of capital needs to

be supported, to be constructed, if we are to keep our clean water objectives alive.

We have recently made a further and more refined survey of the most acute needs in New York State to bring our waters up to the standards and to maintain them at those standards, and that number is $6 billion. We cannot—we will not—have, under the Federal program, $6 billion worth of grant assistance. At best, remaining is several hundred million dollars' worth of grant assistance.

The endeavor to shift to a revolving fund program, therefore, has great importance with respect to the long-term environmental and health objectives of the State of New York. The more money we put into that loan program the more money we will have available to support these needs across the State of New York for the indefinite future. For instance, we estimate that every dollar contributed now to capitalize that fund will support three dollars' worth of construction. With the revolving fund capitalized maximally under the present Federal program we could meet the $6 billion of need across New York State. Without that maximum conversion we will not be able to meet that need, so the effort that's underway now in the State is to evaluate the transition from the grant program to the revolving loan program and to avoid many of the hardships that exist while at the same time looking at the long-term future of the State of New York and its interests and making judgments about that.

We have a series of hearings across the State being held on this particular issue. You pointed out in your own opening statement that the closest one to this area is being held in New York City in November.

Senator MOYNIHAN. November 23d.

Mr. JORLING. In addition to those hearings there have been large amounts of information assembled by the State that are available from the Department or any of its regional offices so that citizens and public officials can be informed as to what is at issue in making the judgment as to whether or not to make the transition in fiscal year 1988 or 1989 to the revolving loan program or to remain with grants, and what the consequences of all of those possibilities are. The Governor has indicated it is the intention to transfer fiscal year 1988 funds. He had to do that in order to make that possibility even exist. If we hadn't made that registration of intent to the Environmental Protection Agency, that would have had the effect of foreclosing that option for the State of New York. That does not mean that the Governor has finally decided to recommend to the legislature that maximum diversion occur in 1988 or in 1989, but it does preserve for us the option. We will be looking forward to hearing from all of the communities across the State their views on this matter.

Senator MOYNIHAN. Mr. DioGuardi?

Mr. DIOGUARDI. That's going to be a critical issue for Mamaroneck and Westchester County. A maximum diversion in 1988 would cost Mamaroneck $50 million. That would mean that Mamaroneck would be paying for 100 percent of this sewage upgrade, and I think that would be untenable.

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I understand the long-range significance of what you're saying, and you're right. If we're going to meet the long-range needs of the area you've got to begin to fund them now because of the actuarial calculations of interest and all to have the money. But in doing that you have to realize that in the short term you could be hurting communities that have been very responsive, and Mamaroneck is one of those communities. Something has to be done. That's the letter that I'll be sending to the Governor very shortly, and hopefully with the signatures of all the Congressmen and local Senators here—State Senators—because it wouldn't be fair to Mamaroneck, which has already planned for that money, to now have that $50 million removed. The residents in this area would incur a tremendous burden.

Mr. JORLING. I guess one quick response is President Carter's classic response that "life isn't fair."

Senator MOYNIHAN. But he also said—and I remember him saying it, he really would—he would wrap up meetings by saying, "Well, to govern is to choose." You know, we're going to have to make a choice. Let's see that it's an open one. We're going to have hearings, I see, in Albany, November 16th—I want to read this for the record—and in Syracuse, November 17th; Williamsville—that's in Erie County—November 18th. You are really making a tour. Out on the islands in Suffolk on November 20th, and the World Trade Center in New York City on November 23d.

Mr. JORLING. A point of information just to get a better understanding of what you said. The Governor has already made an election. He had to make it.

Mr. DIOGUARDI. But does he have to go for the maximum 75 percent in 1988 and 100 percent in the transition period, or can he do some lesser percentage?

Mr. JORLING. He can do a lesser percentage, "up to."

Mr. DIOGUARDI. So Mamaroneck has got to make its case to the Governor now so that we can get this kind of consideration. This is what we have to do.

Mr. JORLING. Mamaroneck's case, I might add, might be stronger if Mamaroneck would enter into a consent decree with the Department that we've been trying to get.

Senator MOYNIHAN. Negotiations.

We hear that Mamaroneck's case might be stronger.

Commissioner, thank you very much.

Mr. JORLING. Thank you, Mr. Chairman.

[A letter from the Village of Mamaroneck follows:]

VILLAGE OF MAMARONECK

Village Hall
Mamaroneck, N.Y. 10543

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October 28, 1987

Senator Daniel P. Moynihan
Chairman
Subcommittee on Pollution
Committee on Environmental Public Works
508 Hart Building
Washington, D.C. 20510

Dear Mr. Chairman:

Thank you for the opportunity to comment for the record on the problems of Long Island Sound.

At the hearing on Monday, October 26, 1987, at the Mamaroneck Town Center, a speaker (I believe it was Commissioner Jorling of the New York State Department of Environmental Conservation) said that Mamaroneck Village has still not signed a Consent Order that would allow the upgrading of the Mamaroneck Sewage Treatment Plant to move forward. I wish to correct the record. It is the County of Westchester that has not signed the Consent Order and has thus delayed the upgrading of the wastewater to secondary treatment and has also jeopardized the grant funding of the project.

The treatment plant itself is located in the Village of Mamaroneck at Harbor Island, an inlet of Long Island Sound. The whole village and parts of six other communities comprise the Mamaroneck Valley Sewer District. Westchester County collects the taxes and is the one responsible for the maintenance of the plant. The cost of upgrading each of three parts (the pumping station, the outfall pipe and the building itself) was originally to be funded by grants from the federal government. The pumping station has been funded and completed. The outfall pipe is in the funding stage; only the plant itself has been delayed by the Consent Order. This project should be "grandfathered" and allowed to be funded by the grants as previously agreed. It is too important to the ecology of Long Island Sound to be ignored (18,000 gallons a day discharged into Long Island Sound). Does not the federal government have jurisdiction over interstate waterways?

At the Long Island Sound conference at SUNY, Purchase, on Saturday, October 24, 1987, it was stated that even treated wastewater is a contributor to pollution. The key to preventing further deterioration of water quality is implementing of a regional land use plan.

Finally, we all need to rethink the concept of ownership of land. How do you claim ownership over that which is alive, i.e. our water, trees, etc. Perhaps the idea of stewardship -- protecting in order to pass on -- would be more appropriate.

I thank you for this opportunity to enter into the record concerns which I have about Long Island Sound.

Very truly yours,

Beth Hofstetter

Beth Hofstetter, Trustee
Village of Mamaroneck

BH:RD
cc: Mayor and Board of Trustees
Village Manager
Clerk-Treasurer
Coastal Zone Management Commission
Press

Senator MOYNIHAN. Can I say that, this being a hearing, we will ask you to come up afterwards and give us your name so that we have a record.

We're going to have a brief but very important five-minute video on Long Island Sound, "Survival of the Sea." Mr. DioGuardi is going to introduce the film.

Mr. DIOGUARDI. Thank you, Mr. Chairman.

We have Frances Fisher and Gary Burris with us today. They are the principal officers in a not-for-profit organization called the "Survival of the Sea Society," SOS.

It seems to me that when we talk about partnerships it's not enough to simply have a partnership among Federal, State and local officials, but we must look to other resources such as not-for-profit organizations that are trying to educate the public on the problems that we have.

I met Frances and Gary over a year ago. They sent me their first tape which was a documentary of what's already happened in Florida and New England. If you saw that tape you would be shocked to see what we are doing. They are now working on a documentary for Long Island Sound and they've brought a five-minute clip.

They say that a picture is worth a thousand words, Senator, so I think we ought to see this.

Mr. BURRIS. We have two very short pieces and we're not sure just which one to show. We finished a piece at midnight last night; it just deals with the resources and the fisheries. We have a short piece that we finished a few weeks ago that was a roundup of the look at the Sound. We also looked at North Carolina, Texas and California previously to show that the problem is not just Long Island Sound's problem, to bring more of a national awareness of how severe the problem is nationwide and, in fact, worldwide.

Which one do you think we should show, Frances?

We have a very nice four-minute piece that we have just finished. If you have time we would like to show you both pieces.

Senator MOYNIHAN. Let's see both, Mr. Burris.

[At this point the video tape was shown. A transcript of the text of that video follows:]

SURVIVAL OF THE SEA SOCIETY

Transcript of text for Video Documentary on Long Island Sound presented by the Survival of the Sea Society at the Senate hearing (Subcommittee on Water Resources) presided by Senator Daniel Moynihan. Mamaroneck NY 10/26/87

- -

Once the barriers to outer space were broken, a new era in history began. It was a time of great hope and curiosity. Yet, as the years passed, there was a tinge of disappointment to it all. Outer space was empty.

Even on the moon, there were only rocks and sand, no strange living creatures, not even a blade of grass. Unexpectedly, from outer space, we got a new vision of planet earth. Ironically, it was as though we had never seen the earth so clearly and we learned new things about ourselves, not all of them pretty.

It was a vision which told us what we were doing to the natural scheme of things around us. A vision which showed we were not only desecrating the land on which we live but also spoiling the seas which surround us.

DOCUMENTARY TITLE: LONG ISLAND SOUND: SUMMER OF '87

Long Island Sound wears many masks; it still has places where one can find peace, quiet and tranquillity. Some say those places are threatened more and more.

On a weekend, thousands of pleasure boats ply its waters; hundreds of thousands of swimmers throng its beaches in the summer months. It is still a place where children can escape the city and build their castles in the sand.

Long Island Sound has been called the American Mediterranean.

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Washington, D.C. 20007
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A Nonprofit Corporation

It has also been called the urban sea because of the millions of human beings who live around it. The Sound, by whatever name it is called, is inextricably woven into the fabric of their lives.

Another less pretty mask worn by the Sound, is one of the factories and power plants about it, one of increasing urbanization. Even in its outer reaches, freedom to roam its beaches is no longer assured.

In addition to those millions for whom the Sound means fun and recreation, there are others for whom the Sound means work.

Those are the fishermen; these days their number is diminishing. Catches are smaller now; some species of fish have almost disappeared. Today, along the entire coast of Connecticut, there is but one fishing fleet left (Stonington)

This is home for Don Crawford. Around here, Don is considered something of an old-timer. He's been fishing out of Stonington for more than 40 years. These days, Don, like many other fishermen, is alarmed about the decline in fish harvests

"There's proof in the pudding. You have to have bigger boats with more power, bigger doors and bigger nets. You don't catch as much now as we did in those days with only 90 horsepower engines. Now they've got 600/700 horsepower engines to catch the same amount of fish. They're catchin the same amount but they're towin' three times as hard, twice as big nets, stayin' out twice as long, so naturally there's a decline in the stock."

Narrator: Don, in the 40 years you've been fishing Long Island Sound, how many species have disappeared altogether?

"Well, haddock is so depleted that it's a rarity for us to catch one. Fluke, we used to catch fluke right outside of here, oh, the whole month of June, the whole month of August, September. Very few fluke around here now. Scup, porgies, they're a thing of the past. Every species practically, t there's none to the extent there used to be. None."

Down the fishing wharf aways from Don Crawford, a boat from North Carolina. It belongs to Joe Tate who says that he

comes here because fishing conditions are even worse back home.

"Due to the wet season during the spring and the spring drain-off from swamp drainage for farmlands and chemical fertilizer and stuff that goes into waterways and estuaries, there's no shrimp at home this season.

But the main problem is pollution really, when you get right down to it. It's more people, more pollution, more garbage dumped, more trash, the whole works.

Narrator: Does that kill the fish?

Yes, it kills the fish and industrial pollution and human waste and so on and so forth in the bays and the rivers..."

To the south of Stonington, as the coastline stretches toward New York State, it becomes increasingly urbanized. It was in these areas in the extreme heat of the summer of 1987 that a series of massive fish kills occurred.

Despite a popular conception, there's nothing new about fish kills. The American Indians knew them long before Europeans came to these shores. But this one was exceptionally large. Some suspected a strange disease but they were wrong. You might say it was a simple question of hypoxia, a lack of oxygen.

It works like this. Nutrients, what you might call fertilizer, makes plants grow; in this case marine algae, the plants of the sea. They bloom almost furiously, their rich harvest dies a natural death, then sinks to the bottom of the sea. In decomposing, it consumes great amounts of oxygen and there's no oxygen left for the fish and the plants. The result is dead water and dead fish.

And where do these nutrients come from? Well, scores of sewage plants dump their effluent into Long Island Sound. Then there's that stuff we put on our lawns and golf courses which makes the grass grow. It too runs off into the sea.

Art Glowka is a man in love with the sea. He's a professional airline pilot. When he is not flying, he devotes his waking hours to the well-being of Long Island Sound.

"I would believe that sewage is the main culprit because this is where the major phosphates and nitrates come into the water , and from lawn run-off and the fertilizers there. Of course no one has ever quantified this or ever checked it out. We have a one million dollar a year study (EPA) going on. We're looking through this study at the three major fields or problems.

1) low oxygen in the deeper waters or anoxic areas in the middle of the Sound and in the middle of the summer

2) toxics like PCB's and metals in the shellfish and in the lobsters. These are decreasing because less is being used and they are being banned.

3) we're just looking at the living aquatic resources out there and the numbers of fish.

We really don't have a handle on any of them except we do know that there are low levels of oxygen in the Sound during the middle of the summer and this dead fish kill here is a good example of that. The Sound is the ultimate sink for everything that is aquatic in the total watershed of Long Island Sound and then you would probably have to go into tertiary treatment plants and the education of people that fertilizers and pesticides on their lawns drain directly into the Sound.

Narrator: Art, would you say that Long Island Sound is in danger now? Is it really menaced?

From my point of view, I would say yes. I mean, you don't have to look any farther than all these dead fish right here. Something drastic biologically has happened. When you get wind rows of dead menhadin like this... There's no way of estimating one million or two million of them."

Farther south, a disturbing new element about the fish kill; lobsters too began to die.

Larry McLaughlin fishes from City Island, offshore from New York City. He is something of a rarity; there are not many lobstermen left around these parts. Around here they call him Lobster McLaughlin.

"See, they drop their claws off first in aneffort to conserve their oxygen. I've had lobster kills before but not as bad as this one. The other ones seemed to be more localized in the very hot summers when the water was laying and this is usually an oxygen problem too, but not on the scale we had last week. When something like this happens and their oxygen level goes down real fast, it wipes them right out, knocks them right down. And besides dead lobsters, we were coming up with jellyfish, dead jellyfish by the barrelfuls, starfish, crabs, everything dead laying right on the bottom of the Sound there and the traps started to smell. Nothing wants to go in the trap once it smells bad like that. And so we're just pulling our pots out of the water about 6 weeks earlier than we normally do. We traditionally pull them out in September but we're pulling them out about 4 to 6 weeks early because it doesn't pay. So, the bottom line is that I've got to go get a job."

As soon as the great fish kills of the summer of 87 began, Dr. Barbara Welch, an oceanographer from the University of Connecticut, boarded her vessel. With her, a group of graduate oceanography students. They made measurements of the water's temperature, oxygen, salinity. It was a highly scientific computerized operation. (Researcher) "A hare under 0.2." According to scientists, 5 milligrams of oxygen per litre is considered normal. 3 milligrams is dangerous. Today, it's less than 1 milligram.

Near Dr. Welch's boat, a second vessel scours the sea for fish samples. But there were few fish to be found. Several starfish and crabs, but most of them were dead.

Dr. Welch: "This is as severe as I've seen it and more severe than I have ever expected it to be."

Narrator: "Many fish are dying because of it?"

Welch: "Yes, that is true in the western and far western portions of the Sound, particularly around the Hempstead harbor region. We've seen alot of dead fish today..."

THIS IS A SEGMENT OF A TV DOCUMENT ON LONG ISLAND SOUND IN PRODUCTION BY THE SURVIVAL OF THE SEA SOCIETY.

Senator MOYNIHAN. I'd like to thank Mr. Burris very much for the very graphic presentation. Would you like to leave some thoughts with us?

Mr. BURRIS. Sure. That is just a very quick overview.

Let me tell you little bit about our organization and myself, sir. I'm a former commercial fishing captain. I founded this organization in 1980. From 1972 until 1980 I could see the death of the ocean coming on. I could see it happening, so I founded this organization. We've come a long way. We have been very effective in getting environmental television on the air in this country.

When we were trying to decide on a name for this, my first choice was "The Sound Visit." But to be quite honest with you, if it wasn't for this State and the activities that are going on right now with yourself and the other Congressmen, with the known deterioration of the Sound we wouldn't have a resource left in 50 years. I'm quite serious about that.

One thing we have identified as a major problem, and that is the fact that millions and millions of dollars are put into studies. Those studies lay on the shelf and gather dust. So our mission is to translate all these millions of dollars' worth of work and put it into something that's quite usable so the people can see where their money went. And when it comes time to reacting and voting on issues such as our taxes or fixing sewage plants, they want to know why they must do that, so it makes your job a lot easier.

Senator MOYNIHAN. Well, Mr. Burris, we do thank you very much for this. Having watched your very graphic account, if you could let us have a transcript of your text I would like to place it in this record.

Thank you, Mr. Burris.

If I could ask the Honorable Dolores Battalia if she could come forward. She is a Supervisor for the Town of Mamaroneck. I would like to thank Supervisor Battalia especially for having made this lovely room available.

Ms. BATTALIA. You are quite welcome, Mr. Chairman.

Senator MOYNIHAN. I'm going to ask that you be joined by Assemblyman Ronald Tocci. Is Assemblyman Tocci here?

Ms. BATTALIA. Yes, he is.

Senator MOYNIHAN. Good morning, sir. If you would sit right down next to your colleague.

Mr. TOCCI. My Supervisor.

Senator MOYNIHAN. In the order that you are listed, Mr. Tocci, you are first.

STATEMENT OF HON. RONALD TOCCI, ASSEMBLYMAN, STATE OF NEW YORK

Mr. TOCCI. Senator, it is good to have you in our community. You are always welcome.

I have a vested interest in this area since I am a resident of the community and also chairman of the State Assembly's Committee on Harbors and Coastal Zones, and newly constituted subcommittee of the Environmental Conservation Committee.

Senator MOYNIHAN. So you are now a subcommittee?

Mr. TOCCI. Yes.

Senator MOYNIHAN. Good.

Mr. TOCCI. I really do appreciate the opportunity just to make a couple of points. I don't have any prepared text but I have lived with this problem for many years now and I'd like to emphasize what I think might be a common-sense approach to a problem that seems to be something that we just can't get a grasp on.

I don't think we need any more studies, to begin with. Certainly there should be a study phase of everything, and I think there's SCPU an ongoing study of the Long Island Sound itself. So I get nervous when I hear that we should appropriate more money for studies.

There have been so many professional studies presented and so many points of view that show so much expertise in what the problems are that I truly believe that what we should be looking for now is a common-sense approach to funding where it would be either grants—preferably grants—or loans, but utilizing some kind of a concept where we can get the most for the dollars spent. By that I mean that the municipalities that show innovative and creative ways to address the problem should be the ones that should be rated the highest and they should get the kinds of resources they need to begin to put in place the kinds of processes that will stop the pollution of the Sound.

I think that you're going to find that in Westchester County, which is probably one of the most sophisticated counties in the area, there's also a lot of buck-passing. You heard the County Executive talk about responsibility of local governments in terms of code enforcement to clean out the pipes and to make sure that there aren't unauthorized hookups so that we don't overcapacitate our sewage treatment plants and so on. That's all well and good except for one thing. The local municipalities don't have the resources that the county, the State, or the Federal Government has. And to tell them that they're the ones that are responsible for making sure that there aren't illegal discharges into our sewage system is fine, but where are we going to hire 50 code enforcement officers? Or how are we going to go about making sure that the pipes are cleaned and repaired and fixed? You're talking about massive amounts of money. Even if we did everything there's still the sewage treatment plant which is under the control of the environmental facilities of the county government. Again, you have this dichotomy of who is responsible.

So what we are suggesting is a consolidated sewer or wastewater authority in the county.

Senator MOYNIHAN. County-wide?

Mr. TOCCI. County-wide. I think one authority should be responsible for not only collecting wastewater but also for discharging it. And if something goes wrong we should go to that agency and say, "Hey, you guys are responsible." We have sewage districts that are taxed, and certainly if there's going to be one agency spending money then they should be responsible and they should be accountable to the people as to how they're spending money and we should hold them responsible for doing it the right way.

I would hope that that concept would grow and hopefully we could put some legislation in place that will motivate all the counties to do this by saying that unless you do this you're not going to

get the kinds of money or the kinds of resources that you're asking from the State or from the Federal Government.

So I think that one recommendation——

Senator MOYNIHAN. That would be State-wide legislation, would it not, that would allow counties to make this option?

Mr. TOCCI. That's correct. We already have a piece of legislation that has been introduced that would ask that every county do this, and we would then fund those counties that have in place a consolidated wastewater management system. Also, we would ask that the municipalities participate in presenting a master plan that would be part of a county-adopted document. The reason I say that, when you have flood problems—as you suggested, we have water from Canada that finds its way down into the basin at Mamaroneck. Everybody is responsible that is upstream for some kind of a problem downstream. And to have one community have to absorb the cost of fixing those things, even if it's on a sharing basis, is not fair. If we were going to get $9 million from the Federal Government, even if the Town of Mamaroneck had to come up with $1 million, that's a burden on our local taxpayers. So it is a county problem.

So I would ask that the cost be absorbed by the entire county, maybe shared with the State. That way it would ease the burden and everybody would know that we are doing something that is going to be beneficial to everybody in the long run.

So this concept, if you would take it back and review it we would appreciate your comments later on.

Senator MOYNIHAN. That's a new thought.

Why don't we hear what your Supervisor says about this thing?

Mr. TOCCI. Sure.

STATEMENT OF HON. DOLORES BATTALIA, SUPERVISOR, TOWN OF MAMARONECK, NY

Ms. BATTALIA. Good morning and welcome to you and your distinguished guests. We welcome you to the Town of Mamaroneck. Our citizens are honored to host this hearing of a subcommittee of the United States Senate on a subject of such importance—the future health of Long Island Sound—and on their behalf and for myself I thank you for convening here to further the good work you and your committee have done on this problem.

It is very appropriate that we meet here in a restored public school building that now serves as our Town Center——

Senator MOYNIHAN. Very beautifully restored, if I might say.

Ms. BATTALIA [continuing]. And community meeting place, on a hill overlooking Mamaroneck Harbor, for we are here to learn from each other how to work together to solve a complicated and very serious problem, the ever-worsening pollution of Long Island Sound.

Long Island Sound water quality is vital to the Town of Mamaroneck. The Town of Mamaroneck includes the Village of Larchmont, more than half of the Village of Mamaroneck, and the so-called "unincorporated area." The Village of Larchmont and the unincorporated area together occupy an eight-square-mile area along Long Island Sound with a highly indented and beautiful shoreline of

some nine miles. The Village of Mamaroneck encompasses 3.2 miles, including a portion in the Town of Rye, with a total of about nine miles of equally beautiful shoreline. The total population of the town is about 30,000.

Within our own municipal borders we have taken steps to prevent further pollution and protect the water quality of Long Island Sound. We have established commissions to conduct environmental review and regulation. New laws and policies have been adopted to protect our environmentally-sensitive areas, prevent runoff, and regulate development. In March 1988 we will begin a major sewer system upgrading; the majority of the cost is being funded by Federal monies, and we thank you for your assistance.

The Town of Mamaroneck, Village of Larchmont and Village of Mamaroneck have carefully studied the economic, social and environmental issues arising from their situs on the Sound. Under New York State's Local Waterfront Revitalization legislation the Village of Mamaroneck, jointly with the Village of Larchmont, has prepared and had and had approved by the Department of State the Local Waterfront Revitalization Program. Copies of these two report documents have been provided to your staff. These studies document in detail the full extent of my town's dependence on a healthy Long Island Sound for its continuing economic, social and environmental well-being.

This past summer's environmental crises on Long Island Sound, with the attendant fish kills and beach closings in Mamaroneck, Larchmont and elsewhere, was for us not a surprise but a tragic reminder of just how serious our problem is. We see and suffer the results of the Sound's being overburdened by treated and untreated sewage, runoff, toxic discharges, and—we are told—agricultural runoff from elsewhere in the Long Island Sound drainage basin where agricultural uses of land are still prevalent. In short, Mr. Chairman, in Mamaroneck we live on Long Island Sound and as goes the Sound, so goes the quality of our lives. And as I'm sure you know, we are very worried. We know you and your committee share our concern and want to help us. Let me suggest the kind of help the Federal Government can provide.

It is well-recognized that the future health of Long Island Sound is directly tied to prudent planning for the use of land in the Sound's drainage basin, but of course the size of that drainage basin and the number of governmental jurisdictions it covers—which could be as many as 75 or more—have always made any thought of coordinated planning impossible. So instead, government at all levels has ignored the absolute necessity for coordinated planning. But now we can no longer afford the luxury of parochial planning. The Sound is an interstate waterway and the Federal Government, as this bicentennial year reminds us, was formed to regulate the use of interstate waterways.

The Federal Government does, of course, regulate Long Island Sound's use in many ways, and under the Clean Water Act—now called the Water Quality Act of 1987—is requiring the secondary treatment of sewage and otherwise regulating water pollution. But the ongoing Long Island Sound water quality study being funded by the Federal Government will, I believe, prove what many of us suspect: over-development in the Sound's drainage basin, if not

checked, will render impossibly expensive the costs of cleanup. Without sound planning we will not be able to upgrade sewage treatment plants fast enough and the costs will be astronomical. Moreover, no one can say how we can "treat" non-point specific pollution caused by urban runoff, so we must attack the problem of drainage basin land use planning.

The planning is not a job for the Federal Government, but bringing the parties together and acting to stimulate and coordinate the process is very much the job of the Federal Government. So far as I am aware, at this time there is no effort by the Federal Government to promote interstate cooperation in the planning of land use in the Long Island Sound drainage basin. I respectfully submit that your committee should consider appropriate legislation to begin such an effort at the earliest possible date.

We are pledged to work with you. Time is of the essence.

Thank you very much, Mr. Chairman.

Senator MOYNIHAN. I must say, the number of occasions on which we surface new ideas in public hearings—I don't need to tell either of my colleagues in public life—is not that frequent. You've come along with a first rate idea, and you've come along with another.

What do you think of his idea, if I can ask you?

Ms. BATTALIA. I would like the record to accurately reflect the fact that we're—in regard to the Mamaroneck Sewer District, I believe that the Village of Mamaroneck may have been unjustly maligned here this morning. But the Mamaroneck Valley Treatment Plant is a totally different entity. Many communities use that facility. In fact, under the Clean Water Act, the county was mandated to upgrade the treatment of that plant.

Senator MOYNIHAN. That's right.

Ms. BATTALIA. I believe what Commissioner Jorling was probably referring to was the fact that the county has spent 5 years resisting that consent order and has not yet entered into it.

That point being aside, what we have now are local taxpayers who pay their Federal taxes to fund the Clean Water Act, and pay the Sewer District tax. And now the funding that you have provided will be gone because the decree was not in place. And now the State is telling us they can't make a grant, and our taxpayers are being told that their taxes—just for this particular item—will be quadrupled. They are caught between a proverbial rock and a hard place, as are all the local communities who sit on any of the four streams with any of the sewers emptying into any of the rivers in the community. We have pleaded with other communities to not develop land that will negatively impact us severely. We have pleaded with other communities to address our needs——

Senator MOYNIHAN. The riparian effect.

Ms. BATTALIA [continuing]. That must be addressed.

Senator MOYNIHAN. I see Ron nodding in agreement.

Mr. TOCCI. Absolutely, Senator. There's no question. The people of this community assumed, over 50 years or better—as long as the Sewer District has been in place—that that money that they were spending would go to do sufficient things to safeguard the Sound not only for their own residence, but for everybody who took advantage of it.

Sad to say, one of the only county agencies that does not have a citizens' advisory committee is Environmental Facilities, which is very, very technical and sophisticated and requires expert engineering. But I would think that since they do spend so much money and there are so many people that are so concerned about what happens, it would certainly make sense—maybe mandates, even—that before money is spent or given, that they do these kinds of things.

So what the Supervisor is saying is very, very true. We are now being penalized if this in fact becomes policy. I think the legislature is going to be more sympathetic when they hear what's going on, but certainly you should be aware because you have done a lot of work and we do appreciate the fact that you've focused your attention on this very serious problem.

Senator MOYNIHAN. I would like to think I know Westchester County as well as the next person who doesn't have the privilege of living here, and I certainly know Dolores Battalia to be clear, concise, and factual, but I was completely befuddled by your account of what is in the Town of Mamaroneck.

You tell me that within the Town of Mamaroneck will be found half the Village of Mamaroneck. Where is the other half?

Ms. BATTALIA. The other half is in the Town of Rye, although it is not contiguous with the rest of the town. Senator, you would be here for a week trying to understand the governmental system of this part of the State of New York and of Westchester County. There are 47 individual municipalities which comprise Westchester County, so I don't think you want to get into that.

Senator MOYNIHAN. No, I don't think so.

Should we be thinking of an interstate compact for the Sound?

Ms. BATTALIA. Absolutely.

Senator MOYNIHAN. It would include New York and Connecticut and, arguably, on the map, Rhode Island.

Ms. BATTALIA. Absolutely. You must bring those together because we have told them the steps that the local communities can take, but we need this regional approach. It has to move regionally to the counties, it has to move regionally to the State, and then it has to move regionally interstate.

Senator MOYNIHAN. We'll get onto that. We'll get all of our Congressional delegations together and we'll see whether the States like it.

Thank you both for appearing here. I really do appreciate it.

Now, what ever happened to the other half of the Village of Mamaroneck?

Ms. BATTALIA. It's in another town. It's in the Town of Rye.

Senator MOYNIHAN. We're now going to have a concluding panel of experts and citizens. We're going to ask Kevin Bricke, who is Deputy Director, Water Management Division of the United States Environmental Protection Agency; we're going to ask Mr. Garrison Corwin of the Long Island Sound Task Force, and Mr. Robert Funicello of the Federated Conservationists of Westchester County to come forward. And in the manner of these things, Mr. Bricke is first. We welcome you, sir.

STATEMENT OF KEVIN BRICKE, DEPUTY DIRECTOR, WATER MANAGEMENT DIVISION, U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION II

Mr. BRICKE. Mr. Chairman, my name is Kevin Bricke. I'm Deputy Director of the EPA Region II Water Management Division. I thank you for this opportunity to speak to you today about Long Island Sound——

Senator MOYNIHAN. Do you have a prepared statement?

Mr. BRICKE. Yes, I do. I will have it typed up and submitted for the record.

Congress established the National Estuary Program in 1985, and the Long Island Sound was one of four estuaries originally selected for in-depth study. The Sound was selected because it is an estuarine resource of national significance that is threatened by pollution. It's an interstate waterway. As you mentioned, it's 110 miles long and 1,300 square miles in area. It's an estuary that contains a wealth of fish and shellfish, but is threatened by the point and non-point sources of pollution generated by the millions of people who live within the basin.

When I speak about the Long Island Sound study the question that I'm asked most frequently is, why waste time planning? Why not act now? A May 5th Newsday editorial captures this sentiment. It is entitled, "The Sound Needs Cleanup, Not More Studies." My response is that it needs both.

Since the passage of the Clean Water Act in 1972 the thrust of water pollution control efforts in this country has been in implementing technology-based controls for point source discharges of pollution. It has taken a while but we're now at the point where full implementation of these technology-based controls is becoming reality. Industrial discharges are now subject to stringent, "best available treatment" limitations. Compliance with these limitations in New York and Connecticut is better than 90 percent.

Similarly, municipal discharges are subject to secondary treatment limits. Compliance rates in New York and Connecticut hover around the 90 percent mark. Consistent with the national municipal policy, any municipal facility that will not meet secondary treatment requirements by July 1st, 1988 will be placed on a judicially-enforcable schedule.

More recently, we have moved aggressively to ensure the approval and implementation of pretreatment programs to control indirect industrial discharges. We now have approved pretreatment programs all around the Sound. We will be carefully monitoring implementation of these approved programs.

Unfortunately, technology-based controls for point source discharges of pollution are not adequate to protect Long Island Sound. We will therefore have to move to a higher level of control that will include more stringent water quality-based limits for point source discharges, and/or additional non-point source controls.

This is where planning is essential. We need to know what pollutants to control, to what level, and from what sources in order to meet our water quality objectives. In short, we need to understand cause and effect prior to implementing more stringent control programs. These programs will undoubtedly be quite expensive.

The focus of the Long Island Sound study is on two problems: hypoxia and toxics. Since my time is limited I'll focus on the study's highest priority, hypoxia.

Each summer as water temperatures rise and the Sound stratifies—warm water on the top and cold water on the bottom—dissolved oxygen levels in the bottom waters of the Sound plummet. During this time the dissolved oxygen levels in large areas of the western and central basins of the Sound decrease to less than three milligrams per liter, well below the established standard of five milligrams per liter. These levels of dissolved oxygen are unsuitable for fish and shellfish. Mobile species leave the area of low dissolved oxygen; immobile species die.

This situation is intolerable. What's causing it?

It appears that the problem is caused by excessive discharge of nutrients, nitrogen and phosphorous, to the Sound. These nutrients, which are not effectively controlled by existing technology-based programs, are fuelling the excessive growth of algae. While they are net producers of oxygen in the light, they are net consumers of oxygen in the dark. In addition, when they die they settle to the bottom, decay, and consume additional oxygen.

While I can come before you today and tell you about the problem qualitatively, I cannot do so quantitatively. We don't know enough to determine what kind of nutrient control program will be required to alleviate the hypoxia problem. In order to better understand cause and effect we have assembled a team of the best scientists and engineers available. These scientists and engineers come from State University of New York at Stony Brook, the University of Connecticut, NOAA, and from the private sector. They will construct hydrodynamic and water quality models of the Sound that will enable us to establish a technically-defensible nutrient control program. That program will be ready for implementation by September 30th, 1990. It is at that point that we will need broad-based support for implementation of the plan.

Thank you.

Senator MOYNIHAN. Thank you, Mr. Bricke.

May I just say gently that when officials of the EPA have appeared before this committee we expect that testimony be in writing and submitted in sufficient copies for the committee staff and others.

Mr. Corwin?

STATEMENT OF GARRISON CORWIN, LONG ISLAND SOUND TASK FORCE

Mr. CORWIN. Thank you, Senator. I do not have prepared remarks——

Senator MOYNIHAN. That's quite all right. You are not an official of the United States Government.

Mr. CORWIN. I can also say that I don't very often appear on panels with officials of various government agencies.

I am a citizen activist. I'm an attorney; I grew up in this Westchester County and spent a great deal of time on the Sound. I had a rowboat when I was six in 1940, and over the weekend I sailed

from Marble Head to Stony, so I'd like to say that my remarks come from personal experience.

I got involved with the environment because I love the outdoors. In the mid-1960's I was one of the founders of a task force, an action group, called the Long Island Sound Task Force. We started in 1972 and we became a chapter of the Oceanic Society in 1976. What happened was that in the course of becoming active on Sound issues, a whole group of interested people developed and we got into education programs and we held member activities.

On the issue of what we're talking about today, we've participated in the dredging problems of the Sound. We've made some enemies because we favored dredging and dumping on the Sound, what we felt was a moderate and responsible position. We felt that that dumping had to be controlled and supervised. And today, commercial users of the water and our recreational users of the water enjoy the benefits of substantial improvements after dredging where the spoil is acceptable and where the dumping is controlled.

We have a couple of experiences that are valuable to the area that we're discussing today. They do not reflect well on New York State, but I'd like to project this in a constructive way instead of a negative way.

New York State was very slow on coastal zone management. We were behind Connecticut and New Jersey. We know that because we participated in the Connecticut area study. We actually prepared papers to sue New York State for their failure to implement the coastal zone management program. I remember saying that we should have one more meeting with the State before we served the papers, and Hank Williams was in the Secretary of State's office at that time. He saw fit to agree with us, and finally we are—just now—in the development and implementation phase of this program in New York State, whereas Connecticut and New Jersey have had their programs in position for some time.

We have this Mamaroneck sewage situation, which I won't go into the details of, but we hear public officials on the radio and in political situations who now feel that the plant should be upgraded who were on record years ago for delay or study or against it. We can't expect the Sound to stop getting worse unless we stop what man puts in it. I don't think—I don't have to go into the detail. It's been clearly set forward today.

I would like to project a couple of slightly different ideas. I think that the three key issues that have come forward are study action, fearlessness, and coordination of governmental activities.

On the study action dichotomy, we feel very strongly that we don't know much about the Sound. We have a research vessel; scientists that are on board and have worked with us and we have participated and encouraged the variety of studies through the citizen panel of the Long Island Sound study, and we feel that is a good thing. However, the fact is that we cannot keep dumping into the Sound without it getting worse. Whether or not nature caused this problem this summer or man caused it, what man is doing is wrong. We have a very strong belief that that should change.

On the fearlessness issue, I think we have to start enforcing the law. Think of a guy who bought a house, unknowing as to where the sewage went. He should have to pay the cost of getting that

fixed. And the guy that sold him the house maybe should have to think about whether that's a latent defect or a patent defect because if he sold him something that isn't right, he may be responsible.

Senator MOYNIHAN. A latent defect or a patent defect? I'm not an attorney. Could you help me with that?

Mr. CORWIN. One that's obvious, or one that's not determinable by normal inspection.

Now, maybe the Government should help these people solve these problems, but the problems have to start getting solved and we have to stop talking about who is going to pay for it and who isn't. Maybe Mamaroneck should have to bear—or maybe the Mamaroneck Sewer District as a whole should have to bear—some of the cost of this. It's only secondary treatment. Secondary treatment doesn't cure us; we still have the problem of a lot of matter that's going to get into the Sound and continue to decay. We're talking tertiary treatment now.

Senator MOYNIHAN. Yes.

Mr. CORWIN. On the last issue, I'd just like to tell a couple of quick stories.

I'm on the board of a sailing club, and—I don't know; my forebears were whalers and everyone of my grandfathers were sailors. I have become a member of a yacht club which I could never had joined if they went through the normal practice of finding out if I was a decent person or not, but I got it because I earned it.

In appreciation of all this I decided I should do something for the club in return for what I got. The trustees of this club had been struggling for years with the fact that we were dumping our sewage right out into the Sound. And they said, "This is wrong." This is before I ever heard of the environment. And in 10 years we did at least three studies. We commissioned people to tell us what to do about this sewage. And the City of Rye told us one thing, the State of New York told us another, and the Federal Government told us a third.

We finally went to the City of Rye and asked them if we could use their good offices to get a Federal grant to lay a sewer pipe down the road to handle our sewage effluent, two other clubs' sewage effluent, the Boy Scouts' sewage effluent, and anyone on that street who cared to join. After some problems we got it done. We solved our own problem with the help of Federal money, and we thank you for that. But it was a hard issue in terms of Rye telling us one thing, New York State telling us another, and the Federal Government still another.

We had a second problem, which was erosion. A nice area of sully grass and eel grass and spatina and all this stuff that I never could figure out, died because of being choked out by erosion from our parking lot. We suggested that perhaps it was a good idea to build a seawall. It took us five years. The only way we got it done is—there were 12 agencies involved in approval of the seawall. We brought them all to the club, we gave them a nice lunch, and we said, "We want to shore up this environmental area. Sure, it's small, but how are we going to do it?" And all of a sudden, instead of pulling in different directions, they all started talking together and it got done.

Now, we need leadership and coordination——

Senator MOYNIHAN. I hear you. I also believe that those who do good should learn to do good in minute particular. One seawall, one sewage connection——

Mr. CORWIN. Thank you, Mr. Chairman.

Senator MOYNIHAN. And you, sir, are representing the Federated Conservationists?

STATEMENT OF ROBERT FUNICELLO, FEDERATED CONSERVATIONISTS OF WESTCHESTER COUNTY, NY

Mr. FUNICELLO. Correct. FCWC is a 20-year-old organization, with 90 organizational members and about 400 individual members throughout Westchester County. Garry Corwin is also on our board.

Rather than repeat Mr. Corwin's autobiographical tale I will say simply that I was also born here—not quite as long ago as he was—in Mamaroneck, and I'm not nearly as good a sailor as he is, but I do get out on the water.

I can however, not claim innocence with respect to government, such as Mr. Corwin lays claim to, because I formerly was a member of the Board of Trustees of the Village of Mamaroneck for 6 years. And I must say that while we tried to be part of the solution to water pollution of Long Island Sound, the village's sewer system was, very often, part of the problem.

Rather than repeat Mr. Corwin's testimony in slightly different ways, I would like to focus attention on the land use aspect of the problem, which I believe is very important. I heard Supervisor Battalia's testimony and speaking for my organization of which I am Vice-President, I can say that we would wholeheartedly support any effort to bring together and coordinate the work of those governmental agencies responsible for land use regulation in the Sound's drainage basin. It is way past time that various jurisdiction's stopped dealing with each other as if we were the Kingdom of Jordan and the State of Israel and begin to work together to solve this problem. I just don't believe that's going on.

I was just at a conference Saturday on Long Island Sound and heard Lee Koppelman, a planner from Suffolk County, who has written books on Long Island Sound regional planning and who for many years has been working on this problem. He seemed a very frustrated and almost cynical man in his remarks concerning the future of the Sound. It sounded to me as if he had virtually given up hope of ever bringing together the necessary governmental action on the various levels. God knows, we have more than enough levels of Government in this county and this State.

That's really the problem. Without proper planning, we're not going to be able to afford to fix the pollution problem with sewage treatment plants. I understand, for example, that if we wanted to upgrade to tertiary treatment in the Mamaroneck Sewer District, which the current EPA study of the Sound could recommend, the cost could be $50 million in addition to the $100 million that will be spent to upgrade the plant to secondary treatment. In view of the phase out of Federal funding, I just don't think that the local taxpayer will be able to come forward and spend that kind of

money. As you say Mr. Chairman, because it's very hard to see where the sewage is coming from—the problem is underground, the broken pipes are underground. The 80-year-old sewage systems are underground—it's difficult for the taxpayer to visualize the need. So who in elected office is going to want to fix something that's underground when one can put a park up on top of the ground and people can play in it and put a plaque on it? And I'm saying this because my name is on a few of those plaques, and I think I understand the motivation of local officials and local taxpayers.

Senator MOYNIHAN. Nobody ever put their name on a sewage pipe.

Mr. FUNICELLO. I can see the Senator has had experience with running for public office.

There's no question about it, Senator. The problem is really enormously expensive. I don't foresee, in my own opinion, that even a wealthy area like Westchester—so-called wealthy area—would ever have the money necessary to alone support the kind of infrastructure improvement that we would need if we don't reign in development in the Long Island Sound drainage basin.

If something is not done with respect to the control and the use of land in sensitive drainage systems like Long Island Sound—as you say, everyone is moving to the coast the problem will be beyond our ability to solve. For example, there is a proposal in New Rochelle to put a new city on an island of 78 acres, David's Island, formerly owned by the Federal Government. The plan calls for a 4,000-person population and 50-story buildings. If that development was built, it would be only the beginning of similar development of Long Island Sound. It's a beautiful area. Everyone wants to live here. I don't think that can happen within the construct of our present tax-raising and -spending ability. I don't think we can afford to add all those people here. The simple request that we're making of the Federal Government is to help us plan for the rational use of the Long Island Sound drainage system.

Senator MOYNIHAN. Gentlemen, I thank you.

A couple of things that I'd like to say is that "the grass came back." We don't ever want to despair of the renewal capacities of natural systems.

This committee, when we reorganized ourselves in January, as we do every year, we took the old Committee on Public Works and reconstituted it as this Subcommittee on Water Resources, Transportation and Infrastructure, and we are looking now to the next generation of activities. We've built our Interstate Highway System. This monumental public works is done. We have mainly finished up our secondary clean water treatment plants.

Particularly, the pattern of each of you, which has been well-stated, is of multiple responsibilities in dealing with the Government—and I'm still trying to figure out how half of the Village of Mamaroneck got into the Town of Rye that these things need to move to a higher, more collective level. I mean, you can't say, "You're upstream and we're downstream." That won't work. And certainly, the county is the first aggregative level; the State follows, and the Federal Government follows. And we are going to have to try to think of those to get people's attention.

I am, at times, preoccupied with, as you mentioned, the question of the water supply of Nassau and Suffolk Counties. It's a sole-source aquifer; everybody drinks from one well. And that will go on forever and ever if you just don't open it up. You know, the Pine Barrens and the recharge areas—the water you drink on Long Island fell as rain 50 years ago. If you keep it clean it will go on forever. If that well ever gets polluted you can't undo it.

Our public life is snipped into little bits of 2-year terms and 4-year terms. I suppose I represent the longest term in American public office, the 6 years that a Senator serves. But there are people in some organizations since 1972 who are still at it.

Mr. CORWIN. You may know the spirit behind this group, Nancy Matthews.

Senator MOYNIHAN. Yes, I do, indeed.

Mr. CORWIN. And if you happen to run into her, just say—she was the Executive Director of the Sierra Club in New York City and she created this organization, conceived of it.

Senator MOYNIHAN. I will ask both of you this. In your time, have you seen us as a people becoming more aware of these time dimensions and the interconnections of things?

Mr. FUNICELLO. Surely. No question. I was in Washington, D.C., working for the Enviornmental Law Institute just after I graduated from law school in the 1970–1972 period. By the way, DEC Commissioner Thomas Jorling was then, as you probably remember, a member of the staff of this committee and had a major hand in writing the Water Pollution Control Act of 1972.

It's fortunate, I think, that a man of that experience is now coming into a position to help implement this.

There's no question that adoption of the National Environmental Policy Act and some other pieces of Federal legislation and copycat legislation on the State level, that by hook and by crook—and as the result of a lot of public interest activity which organizations like ours can take pride in—governments are beginning to look at a much longer range when they make decisions involving the environment.

Senator MOYNIHAN. I just hope that, having gotten into all that work in the decade of the 1970's, that the decade of the 1980's doesn't—"It's your problem, you do something about it."

Sir?

Mr. CORWIN. Westchester has just had a program of study called "Westchester 2000" which deals with the future of Westchester. Without too much difficulty we were able to establish the concept that future development should have environmental consequences in mind. Thus all the recommendations and reports or whatever are qualified with the recognition of the need to respect the environment. But now, we are looking at a charter revision, and this committee is using the offices of Westchester 2000 and is pretty much a direct result of Westchester 2000.

I was interested to see that one of the many specific proposals for the charter revision, which is another issue—but one of the proposals is the allocation of the use of the excess sewage capacity that exists in Westchester County. We've got to get this concept to reach to more levels because maybe there is excess sewer capacity——

Senator MOYNIHAN. I'm going to have to thank our hosts, the Town Center, because we have to close this hearing. But can I just say that it would be so easy to make a dichotomy between doing something and studying, which really doesn't exist there. You do things and you study things continuously.

Mr. CORWIN. You learn from them. You learn from your implementation as to what you must do next.

Senator MOYNIHAN. The Long Island Sound study may go on for 30 years.

Mr. CORWIN. You don't have uncontrolled action, but you're studying what should have been done before the action was taken.

Mr. FUNICELLO. You know, when we rezoned the Town of Mamaroneck we imposed more controls on land use to allow us to fix the flow of events in time so that we would have time to study. There are people who are even proposing that now for the Long Island Sound drainage basin.

Senator MOYNIHAN. I conclude this hearing with the sense that we have people around the county who care about its future and who are doing something about it. I thank you very much.

This hearing is adjourned.

[Whereupon, at 11:35 a.m., the subcommittees were adjourned.]

[Statements submitted for the record follow:]

UNITED STATES SENATE
SUB-COMMITTEE ON WATER RESOURCES, TRANSPORTATION AND INFRASTRUCTURE
HEARING ON WATER RESOURCES AND POLLUTION PROBLEMS IN
LONG ISLAND SOUND
MAMARONECK, NEW YORK — MONDAY, OCTOBER 26, 1987

PREPARED REMARKS BY
WESTCHESTER COUNTY EXECUTIVE ANDREW P. O'ROURKE

THANK YOU SENATOR MOYNIHAN FOR THE INVITATION TO TESTIFY THIS MORNING ON THE POLLUTION PROBLEMS OF LONG ISLAND SOUND.

I WELCOME OUR DISTINGUISHED SENATOR AND OUR STATE COMMISSIONER OF ENVIRONMENTAL CONSERVATION, MR. JORLING, TO ONE OF OUR MOST PICTURESQUE SHORELINE COMMUNITIES. IT IS FITTING THAT WE ARE GATHERED HERE IN MAMARONECK WHERE OUR TIES TO THE SEA ARE SO EVIDENCED BY THE BEAUTIFUL SHORELINE, MARINAS, BOATING INDUSTRY, AND BEACHES. UNFORTUNATELY, MAMARONECK, MORE SO THAN THE REST OF OUR SHORELINE COMMUNITIES, HAD TO ENDURE REPEATED EPISODES OF BEACH CLOSINGS, FISH KILLS, AND NUISANCE ALGAE BLOOMS ONCE AGAIN THIS SUMMER.

WESTCHESTER, LIKE OUR NEIGHBORING NEW YORK AND CONNECTICUT COMMUNITIES, HAS BEEN WORKING TO BETTER UNDERSTAND AND SOLVE THE WATER QUALITY PROBLEMS ASSOCIATED WITH LONG ISLAND SOUND, BUT THE FOCUS IS USUALLY CONDENSED TO EACH OF OUR RESPECTIVE BACKYARDS. THE SERIOUS OXYGEN DEPLETION OF THE SOUND EXPERIENCED THIS PAST JULY SENT SHOCKWAVES THROUGH OUR COMMUNITIES, RESULTING IN A HEIGHTENED AWARENESS OF THE FRAGILE ENVIRONMENTAL CONDITION OF THIS PRECIOUS RESOURCE. HOWEVER, ONE GROUP NOT SO SURPRISED WAS THE SCIENTISTS WORKING ON THE FEDERALLY FUNDED LONG ISLAND SOUND STUDY. THESE SCIENTISTS HAVE BEEN WORKING FOR OVER TWO YEARS GATHERING DATA AND ASSESSING

THE ENVIRONMENTAL SETTING AND PROBLEMS OF THE SOUND ON A REGIONAL BASIS. THE REGIONAL APPROACH TO THIS PROBLEM IS, NO DOUBT, THE PROPER APPROACH, BUT CAN ONLY BE SUCCESSFUL IF WE CAN SECURE COMMITMENTS AND COOPERATION, AT THE LOCAL LEVEL, AS WELL AS THE STATE AND FEDERAL LEVEL.

WESTCHESTER COUNTY HAS UNDERTAKEN MAJOR STEPS OVER THE PAST SEVERAL YEARS TO EVALUATE AND TO REDUCE THE POLLUTION PROBLEMS IN LONG ISLAND SOUND, NAMELY:

- COMPLETION OF COUNTY OPERATED SECONDARY TREATMENT SEWAGE PLANTS AT NEW ROCHELLE AND BLIND BROOK.
- UPGRADING AND REHABILITATION OF PUMPING STATIONS AND SEWER SYSTEMS.
- ONGOING CONSTRUCTION OF AN UPGRADED SECONDARY TREATMENT PLANT AT PORTCHESTER.

IN ADDITION, WE HAVE REDESIGNED THE EXISTING MAMARONECK SEWAGE TREATMENT PLANT, AND OUR COUNTY HEALTH DEPARTMENT MAINTAINS A LOCALIZED SOUND MONITORING NETWORK TO ASSURE ACCEPTABLE WATER QUALITY FOR BATHING AND RECREATIONAL ACTIVITIES. ALSO, OUR COUNTY AGENCIES HAVE BEEN ACTIVELY PARTICIPATING IN THE TECHNICAL ADVISORY AND PUBLIC PARTICIPATION COMMITTEES OF THE LONG ISLAND SOUND TASK FORCE.

A JUST RELEASED STUDY, THE SATTERTHWAITE REPORT, JOINTLY FUNDED BY WESTCHESTER COUNTY AND THE VILLAGE OF MAMARONECK, ADDRESSED THE POLLUTION PROBLEMS OF MAMARONECK HARBOR AND ITS DRAINAGE BASIN. BASED ON ITS FINDINGS AND RECOMMENDATIONS, WE ARE PROCEEDING WITH A PROGRAM OF COUNTY EFFORTS AND WILL BE CALLING UPON LOCAL MUNICIPALITIES TO PARTICIPATE.

LATER THIS YEAR, I WILL BE CALLING FOR A LONG ISLAND SOUND COMMITTEE OF CHIEF ELECTED OFFICIALS TO MEET AND DISCUSS OUR MUTUAL CONCERNS AND EFFORTS.

SO MUCH FOR OUR LOCAL COOPERATION AND COMMITMENT. WHAT DO I SEE FOR STATE AND FEDERAL ROLES.

ADEQUATE AND TIMELY FUNDING FOR LONG ISLAND SOUND STUDY

THE EXISTING AUTHORIZED FEDERAL SUPPORT MUST BE PROVIDED AS SCHEDULED. THE SECOND YEAR FUNDS FOR THE LONG ISLAND SOUND STUDY WERE DELAYED AND THE PROGRAM LAY DORMANT FOR ALMOST A YEAR. I KNOW, SENATOR MOYNIHAN, THAT YOU WERE INSTRUMENTAL IN GETTING THIS PROJECT THE NECESSARY FUNDS, AND I URGE YOU TO CONTINUE YOUR SUPPORT OF THIS STUDY.

GRANT PROGRAM FOR WASTEWATER TREATMENT PLANTS

THE WATER QUALITY ACT OF 1987, WHICH AMENDS THE CLEAN WATER ACT, SETS FORTH A SCHEDULE AND MECHANISM FOR THE TRANSITION TO FULL STATE AND LOCAL RESPONSIBILITY FOR THE CURRENT CONSTRUCTION GRANT PROGRAM.

BEGINNING IN FISCAL YEAR 1987, STATES WILL HAVE THE OPTION TO USE A CAPITALIZATION OF STATE WATER POLLUTION CONTROL REVOLVING FUNDS (SRFS).

THE GOVERNOR HAS NOTIFIED THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY OF HIS INTENTION TO TRANSFER THE MAXIMUM AMOUNTS OF THE STATE'S ALLOTMENT INTO A SRF (STATE WATER POLLUTION CONTROL REVOLVING FUND) AND ELIMINATE ANY NEW CONSTRUCTION GRANTS. THIS MUST BE APPROVED BY ACTION OF THE STATE LEGISLATURE. SHOULD THIS OCCUR, THE COUNTY STANDS TO LOSE APPROXIMATELY $85 MILLION IN GRANTS FOR THE CONSTRUCTION OF THE MAMARONECK WASTEWATER TREATMENT PLANT. THE COUNTY WOULD BE ENTITLED TO APPLY FOR A LOAN. WHILE THE DETAILS OF THE LOAN PROGRAM ARE NOT AVAILABLE, IT IS OUR

UNDERSTANDING THAT THE LOAN WOULD BE OFFERED AT 1/3 BELOW THE COUNTY'S BONDING RATE AND WOULD BE PAYABLE OVER 20 YEARS. OBVIOUSLY THIS WILL PLACE THE ENTIRE FINANCIAL BURDEN FOR SEWAGE TREATMENT FACILITY CONSTRUCTION UPON LOCAL GOVERNMENTS, RESULTING IN SIGNIFICANT TAX BURDEN ON THE DISTRICT USERS.

THE TECHNICAL DECISIONS REGARDING THE ULTIMATE TREATMENT LEVELS REQUIRED FOR THE PLANT HAVE UNDERGONE A TIME CONSUMING STATE AND FEDERAL REVIEW PROCESS. THROUGH NO FAULT OF OUR OWN, WE NOW STAND TO LOSE MORE THAN JUST A TIME DELAY.

NON-POINT SOURCE CONTROL

WHILE SCIENTIFIC STUDIES OF THE SOUND ARE CONTINUING UNDER A CURRENT FEDERAL GRANT, WE STILL DO NOT KNOW ENOUGH ABOUT ALL THE SOURCES OF POLLUTION LOADINGS ON THE SOUND, INCLUDING NON-POINT SOURCES (STORMWATER RUN-OFF, ILLEGAL DUMPING OR SPILLS) AS WELL AS POINT SOURCES (SEWAGE TREATMENT PLANTS). MUCH EFFORT HAS BEEN SPENT OVER THE PAST TWENTY YEARS IN UPGRADING MUNICIPAL SEWAGE TREATMENT FACILITIES WITH ONLY A FRACTION DEDICATED TO THE STUDY OF NON-POINT REMEDIATION. THESE NON-POINT SOURCE PROBLEMS ARE PARTICULARLY DIFFICULT TO SOLVE, AND WE NEED TO GIVE FAR GREATER ATTENTION TO THEM.

THE FEDERAL GOVERNMENT NOW PROVIDES GRANT FUNDS TO STATE AND LOCAL AGENCIES FOR IMPLEMENTING SUCH NON-POINT SOURCE PROGRAMS, BUT NONE SO FAR HAS BEEN ALLOCATED TO THE LONG ISLAND SOUND PROBLEM. WE CALL UPON THE FEDERAL GOVERNMENT, THEREFORE, TO CONTINUE APPROPRIATIONS FOR THIS SECTION OF THE CLEAN WATER ACT AND FOR THE STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION TO EARMARK NON-POINT SOURCE FUNDS TO ADDRESS THE PROBLEMS OF LONG ISLAND SOUND.

THANK YOU.

TESTIMONY FOR COMMISSIONER THOMAS JORLING
TO BE PRESENTED AT SENATE SUBCOMMITTEE ON WATER RESOURCES HEARING
TO BE HELD ON OCTOBER 26, 1987
AT MAMARONECK, NEW YORK

GOOD MORNING. I AM TOM JORLING, COMMISSIONER OF THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION. I APPRECIATE THIS OPPORTUNITY TO ADDRESS THE SUBCOMMITTEE ON THE ISSUE OF LONG ISLAND SOUND POLLUTION.

THE LONG ISLAND SOUND IS ONE OF THE MOST IMPORTANT ESTUARIES OF ITS SIZE ALONG THE ATLANTIC COAST. TO NEW YORKERS, IT IS A POPULAR RECREATIONAL AREA FOR SPORT FISHING, BOATING AND SWIMMING. AND IT SUPPORTS AN ACTIVE COMMERCIAL FISHING INDUSTRY GENERATING APPROXIMATELY $20 MILLION ANNUALLY.

YET, RAPID POPULATION GROWTH IN THE WATERSHED HAS LEAD TO INCREASED THREATS TO THE ENVIRONMENT. APPROXIMATELY ONE BILLION GALLONS PER DAY OF MUNICIPAL WASTEWATER FLOWS FROM NEW YORK AND CONNECTICUT FACILITIES INTO THE SOUND. INDIRECT AND DIRECT INDUSTRIAL DISCHARGES, COMBINED SEWER OVERFLOWS, URBAN STORMWATER

RUNOFF, AND AGRICULTURAL AND CONSTRUCTION RUNOFF ALSO CONTRIBUTE TO THE POLLUTION LOADS.

IT IS NOT SURPRISING THAT THE MARINE RESOURCES WHICH NORMALLY THRIVE IN THE LONG ISLAND SOUND ARE THE MOST SEVERELY AFFECTED BY THE POLLUTION OF THESE WATERS. FOR EXAMPLE, ONE OF OUR BIGGEST PROBLEMS IN THE SOUND IS THE POLLUTION OF SHELLFISH GROWING WATERS. MANY SHELLFISH AREAS ARE CLOSED BECAUSE OF FECAL COLIFORM CONTAMINATION, USUALLY FROM SEWAGE TREATMENT PLANT DISCHARGES, FROM MARINE VESSEL DISCHARGES, AND FROM STORMWATER RUNOFF. THE CLOSURES OCCUR PREDOMINANTLY IN THE WESTERN BASIN, BUT CAN BE FOUND AS FAR EAST AS MATTITUCK CREEK IN EASTERN SUFFOLK COUNTY. ALMOST 10%, OVER 40,000 ACRES, OF NEW YORK'S SOUND WATERS PRODUCE SHELLFISH THAT ARE UNFIT FOR HUMAN CONSUMPTION. GREATER THAN 50%, NEARLY 36,000 ACRES, OF NEW YORK'S BAYS AND HARBORS THAT BORDER THE SOUND ARE ALSO CLOSED TO SHELLFISHING. THIS NUMBER IS ESPECIALLY SIGNIFICANT SINCE IT IS THE TRIBUTARIES, COVES AND NEARSHORE AREAS THAT SUPPORT THE MOST PRODUCTIVE SHELLFISH BEDS.

THE LONG ISLAND SOUND STUDY IS ONE OF FOUR NATIONAL STUDIES FUNDED BY CONGRESS IN 1985 FOR THE EPA TO CONDUCT A WATER QUALITY PROGRAM INCLUDING RESEARCH, SAMPLING, MONITORING AND ASSESSMENT OF AN ESTUARINE WATER BODY. EPA, CONNECTICUT, NEW YORK, NOAA AND THE ISC HAVE DEVELOPED AN INITIAL WORKPLAN OUTLINE WHICH IDENTIFIES MAJOR TASKS AND FORMS THE BASIS FOR THE WORK PLANS TO BE CARRIED OUT BY THE VARIOUS CONSTITUENCIES. A COMPLETE LONG-RANGE LONG ISLAND SOUND STUDY PROGRAM HAS ALSO BEEN DEFINED.

ONE FOCUS OF THE LONG ISLAND SOUND ESTUARINE STUDY IS AN ASSESSMENT OF SHELLFISH RESOURCES AND, ULTIMATELY, A LONG-RANGE MANAGEMENT PLAN WHICH WILL RESTORE ABUNDANT HARVEST OPPORTUNITIES TO BOTH RECREATIONAL AND COMMERCIAL INTERESTS. WHILE WE WORK TOWARD THIS GOAL, THE DEPARTMENT OF ENVIRONMENTAL CONSERVATION HAS INSTITUTED A "CLAM RELAY PROGRAM" TO UTILIZE HARD CLAMS IN UNCERTIFIED WATERS.

CLAMS ARE TRANSPLANTED FROM UNCERTIFIED AREAS TO EASTERN LONG ISLAND BAYS WHERE THEY ARE NATURALLY CLEANSED BY DEPURATION AND EVENTUALLY HARVESTED. THE PROGRAM IS CONDUCTED IN COOPERATION WITH LONG ISLAND TOWNS AND PRIVATE ENTERPRISES. IN 1983, 5,800 BUSHELS OF HARD CLAMS WERE TRANSPLANTED FROM UNCERTIFIED WATERS OF WESTERN LONG ISLAND SOUND AND ADJACENT EMBAYMENTS. BY 1986, THE NUMBER OF RELAYS HAD INCREASED TO INCLUDE ALMOST 37,000 BUSHELS. THIS NUMBER IS SUBSTANTIAL WHEN COMPARED TO THE APPROXIMATELY 65,000 BUSHELS OF HARD CLAMS HARVESTED FROM ALL CERTIFIED WATERS IN LONG ISLAND SOUND IN 1986.

LOBSTERS AND FINFISH ALSO REQUIRE CLEAN WATER. SOME OF THE IMPORTANT COMMERCIAL FISHERIES OF LONG ISLAND SOUND INCLUDE LOBSTERS, WINTER FLOUNDER, BLUEFISH, BLACKFISH AND SCUP. EQUALLY AS SIGNIFICANT IS THE RECREATIONAL FISHERY WHICH IS COMPRISED OF WINTER FLOUNDER, SUMMER FLOUNDER, SCUP, ADULT AND SNAPPER BLUEFISH, AND BLACKFISH. RECREATIONAL FISHING IN THE ENTIRE MARINE DISTRICT IS A MAJOR INDUSTRY WITH A VALUE ESTIMATED AT

$1.5 BILLION. UNFORTUNATELY, TOXIC CONTAMINANTS, SUMMER HYPOXIC EPISODES (LOW DISSOLVED OXYGEN), AND FISHERY EXPLOITATION HAS SIGNIFICANTLY IMPACTED FISHERY RESOURCE USE.

THIS SUMMER WE EXPERIENCED NOT ONLY THE USUAL MENHADEN KILLS BUT ALSO MULTI-SPECIES FISH KILLS CAUSED BY THE SEVERE HYPOXIC EVENT OF JULY AND AUGUST. LOBSTERS IN POTS, THE YOUNG OF YEAR WINTER FLOUNDER, AND OTHER SPECIES WERE UNABLE TO ESCAPE THE AREA OF LOW DISSOLVED OXYGEN AND DIED. THESE ISSUES OF TOXIC CONTAMINATION AND HYPOXIA ARE BEING FULLY EXPLORED IN VARIOUS COMPONENTS OF THE LONG ISLAND SOUND STUDY AS WELL AS BY ONGOING STATE AND COUNTY PROGRAMS.

THE MAJOR EFFORT TO CONTROL TOXICS IN THE SOUND IS THE INDUSTRIAL PRE-TREATMENT PROGRAM, SUPPLEMENTED BY THE DEPARTMENT'S NEW WHOLE EFFLUENT (TOXICITY) TESTING PROGRAM. INDUSTRIAL PRE-TREATMENT PROGRAMS ARE REQUIRED FOR MUNICIPAL SEWAGE TREATMENT PLANTS WHICH DISCHARGE IN EXCESS OF FIVE MILLION GALLONS A DAY. ELEVEN NEW YORK FACILITIES DISCHARGING INTO LONG ISLAND SOUND FALL

INTO THIS CATEGORY. NINE OF THEM ARE IN THE FIRST STAGES OF IMPLEMENTING EPA-APPROVED PRE-TREATMENT PROGRAMS; TWO ARE READY TO BEGIN COMPLIANCE ACTIVITIES. THE DEPARTMENT OF ENVIRONMENTAL CONSERVATION, OR EPA, OR BOTH, HAVE INITIATED ENFORCEMENT ACTION AGAINST FACILITIES WHICH HAVE NOT BEGUN IMPLEMENTING APPROVED PROGRAMS. MOREOVER, ENVIRONMENTAL GROUPS ARE EXERCISING THEIR RIGHTS UNDER SECTION 505 OF THE CLEAN WATER ACT TO BRING CITIZENS SUITS AGAINST FACILITIES WHICH HAVE NOT YET COMPLIED WITH THIS REQUIREMENT.

CONTROL OF CONVENTIONAL SEWAGE WASTE HAS ALSO BEEN DIFFICULT. AT ANY GIVEN MOMENT, IN EXCESS OF 2 PERCENT OF NEW YORK CITY'S TOTAL SEWAGE FLOW IS "LEAKING" INTO THE ESTUARY DUE TO MALFUNCTIONING REGULATORS, PUMP STATIONS, OR PLANT COMPONENTS. TO ADDRESS THIS PROBLEM, THE DEPARTMENT HAS REQUIRED, THROUGH SPDES PERMITS ISSUED TO NEW YORK CITY, THAT THE NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION CONDUCT A REGULATOR IMPROVEMENT PROGRAM. A REPORT HAS BEEN PREPARED, AND AN IMPLEMENTATION

SCHEDULE WILL BE SPECIFIED IN THE 1987 SPDES PERMITS CURRENTLY BEING PREPARED.

LITIGATION IS UNDERWAY AGAINST THREE MUNICIPAL FACILITIES IN WESTCHESTER COUNTY BECAUSE OF UNACCEPTABLE WASTE DISCHARGES. THE RECENTLY COMPLETED NEW ROCHELLE SEWER DISTRICT SEWAGE PLANT WILL BENEFIT THE GENERAL WATER QUALITY OF THE SOUND, BUT THE DISTRICT STILL REQUIRES SEWER WORK TO ELIMINATE PROBLEMS ASSOCIATED WITH COMBINED SEWER OVERFLOWS. THE PORT CHESTER SEWER DISTRICT SEWAGE PLANT IS PRESENTLY UNDER CONSTRUCTION BUT WILL NOT MEET THE 1988 DEADLINE FOR COMPLETION. A CASE IS STILL PENDING AGAINST THE COUNTY OF WESTCHESTER TO CONSTRUCT A NEW TREATMENT PLANT AT MAMARONECK WHERE UPGRADING IS REQUIRED.

IN ADDITION TO THESE IDENTIFIED DISCHARGE POINTS, THERE ARE POLLUTION PROBLEMS CAUSED BY RAINFALL RUNOFF WHICH HAVE LED TO SOME BEACH CLOSINGS IN THE MAMARONECK AREA. IN THE MAMARONECK AND NEW ROCHELLE SEWER DISTRICTS, THERE ARE SEWAGE OVERFLOWS DURING RAINFALL DUE TO EXCESS WATER ENTERING THE SEWER LINES. CONSENT

ORDERS HAVE BEEN EXECUTED TO FORCE COMMUNITIES TO ELIMINATE THEIR EXCESS WATER. IN NEW YORK CITY, DURING AND AFTER ALL BUT THE LIGHTEST RAINFALL, MANY BILLIONS OF GALLONS OF RAW SEWAGE ARE DISCHARGED INTO THE ESTUARY FROM HUNDREDS OF OVERFLOW POINTS. IN ORDER TO ADDRESS THE COMBINED SEWER OVERFLOW PROBLEM, THE DEPARTMENT HAS REQUIRED THE CITY TO DEVELOP A CSO ABATEMENT PROGRAM DESIGNED TO ELIMINATE ALL CONTRAVENTIONS OF WATER QUALITY STANDARDS, AND ALL IMPAIRMENTS OF DESIGNATED USES. A PHASE I REPORT (PROBLEM ASSESSMENT) HAS BEEN COMPLETED. THE PHASE II EFFORT IS UNDERWAY AND WILL INCLUDE SUBSTANTIAL AMOUNTS OF OVERFLOW AND WET WEATHER RECEIVING WATER SAMPLING, TIME VARYING MODEL DEVELOPMENT AND APPLICATION, AND ACTUAL PLANNING OF OVERFLOW ABATEMENT FACILITIES.

IN CLOSING, MR. CHAIRMAN, THE SOLUTIONS TO THE PROBLEMS OF LONG ISLAND SOUND ARE PARTIALLY WITHIN THE GRASP OF INDIVIDUAL STATE GOVERNMENTS. NEW YORK WILL CONTINUE TO MARSHALL EVERY AVAILABLE RESOURCE TO CONTROL WASTEWATER DISCHARGES INTO SOUND

WATERS AND TO DEVELOP CREATIVE PROGRAMS TO RESTORE AND PRESERVE OUR MARINE RESOURCES. SOME SOLUTIONS, HOWEVER, WILL REQUIRE THE ASSISTANCE OF THE FEDERAL GOVERNMENT. THE LONG ISLAND SOUND ESTUARINE STUDY IS A PRIME EXAMPLE OF VARIOUS FEDERAL AND STATE INTERESTS WORKING UNDER ONE UMBRELLA TO ADDRESS COMMON CONCERNS. SEVERAL WEEKS AGO GOVERNOR CUOMO SUBMITTED THE NOMINATING APPLICATIONS TO OFFICIALLY INCLUDE LONG ISLAND SOUND AND THE NEW YORK HARBOR AS A CONFERENCE SUBJECT.

ANOTHER EXAMPLE OF A FEDERAL/STATE PARTNERSHIP IS THE EFFORT WHICH YOU YOURSELF HAVE MADE TO ENSURE THAT SUFFICIENT FEDERAL FUNDING IS PROVIDED TO STATES TO ATTAIN THE JULY 1, 1988 WATER QUALITY DEADLINES MANDATED UNDER THE CLEAN WATER ACT.

LET ME TAKE THIS OPPORTUNITY TO EXPRESS MY GRATITUDE FOR YOUR AMENDMENT TO THE FY 88 HUD-INDEPENDENT AGENCIES APPROPRIATION WHICH REQUIRES THAT SEWAGE TREATMENT PLANT CONSTRUCTION FUNDS BE PAID TO STATES IN CASH AND NOT BY LETTER OF CREDIT. THIS AMENDMENT WILL SAVE NEW YORK STATE APPROXIMATELY $1.3 BILLION OVER

THE NEXT 20 YEARS, PUTTING WITHIN OUR GRASP MANY MORE CONSTRUCTION PROJECTS THAN WOULD BE ALLOWABLE UNDER THE OMB LETTER OF CREDIT SCHEME. WE ARE MOBILIZING ENVIRONMENTAL OFFICIALS IN OTHER STATES TO WORK ON BEHALF OF THE MOYNIHAN AMENDMENT IN THE HOUSE-SENATE CONFERENCE COMMITTEE AND ON FINAL PASSAGE BY BOTH CHAMBERS. ON BEHALF OF NEW YORK STATE AND ALL THE LOCALITIES WHICH WILL ULTIMATELY BENEFIT, AND ESPECIALLY THE PEOPLE WHO WILL GAIN MEASURABLY FROM A CLEAN ENVIRONMENT, I THANK YOU FOR YOUR LEADERSHIP ON THIS ISSUE.

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